REPORT

ON THE

Health of the County Borough of Belfast for the Year 1948

S. BARRON. M.R.C.P.(I)., D.P.H.,
Medical Officer of Health

JOHN K. RANKIN, BELFAST

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SAMUEL BARRON, M.R.C.P.(I)., D.P.H.
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COUNTY BOROUGH OF BELFAST

Health Committee 1948

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Councillor STUART KNOX HENRY, J.P.

Deputy Chairman:

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WILLIAM ERNEST GEORGE JOHNSTON, B.A.
DAVID IRELAND.
HERBERT JEFFERSON, M.A., Ph.D., J.P.

Summary of Vital Statistics

Area (Census 1937) (Exclusive of 1,262 acres of tidal water)	15,289 acres.
Population	455,020 (estimate of Registrar-General for N.I., June, 1948)
Marriages	3,706
Marriage Rate	8.14
Births Registered	9,744
Birth Rate	21.4
Birth Rate average for the ten years 1939-1948	22.0
Births (notified)	11,404
Still Births (included in total births notified)	314
Deaths	4,684
Death Rate	10.29
Death Rate average for the ten years 1939-1948	12.4
Deaths of infants under one year of age	441
Infant Mortality Rate	45 deaths per 1,000 births.
Average for the ten years 1939-1948	84 deaths per 1,000 births.
Neo-natal Deaths (under one month)	223
Neo-natal Death Rate	22.9 per 1,000 births.
Average for the ten years 1939-1948	36.92 per 1,000 births.
Deaths from Pregnancy, Childbirth, and the Puerperal State	13
Death Rate	1.3 per 1,000 births registered
Deaths from Epidemic Diseases	117
Death Rate from Epidemic Diseases	0.2
Deaths from Measles	9
Deaths from Typhoid Fever	1
Deaths from Scarlet Fever	Nil
Deaths from Whooping Cough	15
Deaths from Diphtheria	4
Deaths from Diarrhoea and Enteritis (under two years of age)	66
Deaths from Dysentery	1
Deaths from Influenza	10
Deaths from Tuberculosis of the Respiratory System	269
Death Rate from Tuberculosis of the Respiratory System	0.59
Deaths from Bronchitis	204
Deaths from Pneumonia	224
Deaths from Pleurisy	4
Deaths from other Diseases of the Respiratory System (Tuberculosis excepted)	75

To

The Right Honourable the Lord Mayor (Alderman Sir William Neill, F.A.I., M.P., J.P.) and the Aldermen and Councillors of the Belfast County Borough Council, acting as the Belfast County Borough Health Authority.

My Lord Mayor and Gentlemen,

I have the honour to submit my Annual Report for the year ended 31st December, 1948, on the Health Services administered by the Belfast County Borough Health Committee; the Sanitary Circumstances, Sanitary Administration and vital statistics of the County Borough and other matters upon which I consider it desirable to report.

The period covered by this Report includes a time during which vast changes have occurred in the organisation and administration of curative and preventive medicine, arising from the coming into operation on 5th July, 1948, of the Health Services Act (Northern Ireland), 1948. This very important and far-reaching social legislation closely follows the pattern set by the National Health Services Act, 1946, in Great Britain, and makes provision for a comprehensive medical, dental and nursing service for every member of the community—rich and poor alike; man, woman or child. The services are with certain special exceptions provided "free," that is to say, without specific charge. It must be remembered by everyone, however, that the cost of these great social services must be found somewhere, and that "somewhere" is the pocket of the tax-payer, and, to a much lesser extent, the rate payer. There are no "insurance" qualifications for "benefit" under these services, yet it behoves everyone of us to think carefully how they may be utilised effectively, efficiently and economically.

In addition to the nation-wide extension of the medical practitioner panel service—more fittingly described as the "family doctor care," the dental services and the supply of drugs and appliances controlled by the Northern Ireland General Health Services Board and the institutional and specialist services provided by the Northern Ireland Hospitals Authority, local authorities, through statutory Health Committees, became responsible under the 1948 Act for the provision of a wide range of preventive and special services, including the following:—

Sect. 38 (2) (a)	Arrangements for the care (particularly the dental care) of expectant and nursing mothers and young children.
Sect. 38 (2) (b)	Arrangements with medical practitioners and certified midwives for attendance at confinements of women in their own homes.
Sect. 38 (2) (c)	Provision of a Health Visiting Service.
Sect. 38 (2) (d)	Provision of a Home Nursing Service.
Sect. 39	Vaccination against Smallpox and Immunisation against Diphtheria.
Sect. 40	Health Education.
Sect. 42	Prevention of illness and care and after-care of persons suffering from illness.
Sect. 43.	Provision of domestic helps.
Sect. 44	Arrangements with other statutory and voluntary bodies providing health or allied services.

Some of these services had been in existence in Belfast for many years prior to 5th July, 1948, and our City has reason to be proud of having been in the van of progress in several important respects. It has thus been possible to preserve a continuity of service with staff already fully experienced in these matters. The work which has arisen since the coming into operation of the Act has chiefly centred

round the integration of the new services with the already existing public health services. In this, whilst we cannot yet claim to have completed all the requirements, much has been done to create the organisation necessary for the provision of these new services. It is one thing to have the legislative powers to set up certain services, but the recruitment and organisational problems are not easily and quickly solved by the mere placing of the Act on the Statute Book.

To summarise what has been achieved so far:—

Maternity and Infant Health

The Maternity and Nursing Services Section of this Report show the gradual but sound expansion of the measures for the care of expectant and nursing mothers and young children. The Maternity and Child Health Centres continued their vitally useful services with that efficiency to which we have long been accustomed and plans are not lacking for steady expansion of this important work.

Dental Care

The extension of the provision of dental care so as to include expectant and nursing mothers and pre-school children is not yet possible owing to the grave shortage of dental officers. It seems that some considerable time must elapse before a sufficient number of dentists will be available in public service to ensure that this priority dental service is fully available. Meanwhile we are proceeding with the establishment and equipping of the dental clinics in our Maternity and Child Health Centres, against the time when staffing difficulties are resolved.

Midwifery Services

The institution of the "free" domiciliary midwifery service was achieved in a very short space of time and may now be said to work satisfactorily. General medical practitioners and certified midwives were asked to enter into agreements to attend at confinements and to give ante-natal and post natal care as provided by the scheme. At the end of 1948, 189 medical practitioners and 90 certified midwives were under agreement to undertake domiciliary midwifery services in the City. It is intended to continue the midwifery side of this service on a "fee-per-case, contract-for-services" basis in the meantime, until more experience has been gained of the extent of the firm demand for domiciliary as opposed to institutional service, before proceeding to the appointment of full-time salaried midwives.

Home Nursing

A new responsibility placed upon the Health Committee was that of the provision of Home Nursing. This service had been carried on for many years in Belfast by the Belfast Society for Providing Nurses for the Sick Poor and the citizens of Belfast know, from long experience, the excellent work which was done by that voluntary body and its "District Nurses." It was good, therefore, that the Health Committee were able to enter into an agreement with the Society to enable this work to be carried on, the cost being recouped by the Committee. Unfortunately, the Society has decided that as from 1st April, 1950, it can no longer continue to provide this service on an agency basis, so that the direct administration will have to be assumed by the Health Committee. While regretting that the Society cannot see its way to continue functioning, I am grateful for the continuance of their services during the difficult change-over period, prior to which there had been practically no time available for the setting up of the administrative organisation necessary to operate the Home Nursing Service. The difficulties of recruitment present themselves in this service as in others, and it is doubtful whether expansion beyond the present "home visiting" basis will be possible for some time to come.

Vaccination and Immunisation

The administration of the Acts relating to Vaccination against Smallpox, previously the responsibility of the Board of Guardians, was transferred to the Belfast Health Committee on 5th July, 1948, under the powers given to the

Ministry of Health and Local Government by the Public Health and Local Government (Administrative Provisions) Act (N.I.), 1946. Immunisation against Diphtheria had already been provided by the Belfast Public Health Committee since 1936, either by arrangement with general medical practitioners or by the Committee's medical officers, and on a voluntary basis. Vaccination of infants, which is still compulsory in Northern Ireland, was formerly carried out by public vaccinators and is now chiefly done by general medical practitioners. Where parents so desire, children may be taken to the Health Committee's Vaccination and Immunisation Clinics. In either case, the cost is borne by the Health Committee; general medical practitioners are paid a fee by the Committee for each vaccination and immunisation done by them—provided that no fee is accepted from the parent.

The amalgamation of the vaccination and immunisation services leads to a more economic use of public clinic facilities. It is disquieting to note that, in spite of the elaborate facilities provided, vaccination is only performed on approximately 50% of infants born in Belfast. Every effort has been made by press and poster campaigns, enforcement officer's visits and health visitors to overcome this apathy, with little apparent result; the last resort appears to be to invoke the law against those parents who have failed in their statutory duty.

Health Education

It has not yet been possible to build up an adequate health education service, chiefly because of the efforts required to arrange for the other, and more immediately pressing, new services. That is not to say that nothing has been done: the excellent work of instruction in mothercraft and child hygiene and diet, given at Maternity and Ante-natal Centres, has continued as heretofore. Poster publicity has been utilised on several subjects. The Health Visitors continue the work of health education in their individual contacts with mothers. The importance of Health Education has been recognised by the Health Committee's agreement to the appointment of a full-time Health Education Officer who will be able to devote himself to the co-ordination of all health education devices and methods and to the organisation of a comprehensive health education programme.

Prevention of Illness: Care and After-care

The provision of a service for the prevention of illness and for the care and after-care of those who are ill is, by its very nature, a problem of great difficulty: the possible scope of these matters is so wide; the possibility of over-lap with the welfare, hospital and general health services is so marked, and the whole subject is one which breaks ground so completely new to local authorities, that it can only be developed after very careful consideration. The functions so defined in Sect. 42 of the Act are permissive, and the Ministry of Health and Local Government had not issued any directions as to this service in 1948.

The Maternity and Child Welfare Section continued the narrowly defined aspect of this work which had already been in operation before the Act became law, namely, the follow-up of babies discharged from hospital after illness, especially after gastro-enteritis.

Domestic Help

Under the Maternity and Child Welfare Scheme, domestic help (better known as "home helps") had been provided in Belfast for some years past to those mothers who were being confined, who were in hospital, or who were ill and had young children to be looked after. In spite of the fact that the costs of this service were (and still are) recoverable from the users in accordance with the Social Services Scale, the demand for home helps, even for the category of case to which the service was limited, has far exceeded the supply. It is doubtful whether any great extension of the available panel of home helps can be made in the immediate future, to enable the provision of home helps to the additional categories brought in by the Act. Nevertheless, such extension is desirable at the earliest possible date, since it has become evident that numbers of aged bed-ridden and chronically ill people, who are at the present occupying the attention of the skilled nurses of the Home Nursing Service, could be adequately looked after by the home help.

Statutory and Voluntary Organisations

As mentioned under Home Nursing, one voluntary organisation has already been incorporated into the scheme for the provision of the local authority health services. Efforts will be made to enlist the aid of voluntary bodies in the new field of care and after-care and prevention of illness, but owing to the fact that several voluntary organisations are performing work of a similar kind, co-ordination is rendered difficult.

Much remains to be done to expand the new health services of your Health Committee on the basis indicated above, as experience is gained in their administration and operation. Integration with the allied health services provided by other and newer statutory bodies is at present a relatively uncharted sea: doubtless these organisations are still in the throes of getting established, and with further experience it will be possible to develop the present limited and sometimes imperfect contacts into a broader pattern of co-operation and co-ordination. No health service, no matter how perfect in theoretical design, can operate effectively and efficiently without the whole-hearted co-operation of those entrusted with its working—or without the same co-operation from every member of the community.

Whilst the new health legislation has imposed certain new functions upon the Health Authority, it has also removed certain former obligations, such as the provision of infectious diseases hospitals, the treatment of veneral diseases, and laboratory services, all of which are now the responsibility of the Northern Ireland Hospitals Authority.

Vital Statistics

Although Vital Statistics may not give a complete picture of the general state of health of a community, it is satisfactory to record that in our City during the year 1948, mortality rates were comparatively low; indeed, new low records have been established in connection with the general death rate, infantile mortality, and tuberculosis mortality. In the case of several of the infectious diseases new low records were established for incidence and mortality.

The population of the City, as estimated by the Registrar-General at 30th June, 1948, was 455,020.

The number of births registered was 9,744, giving a birth rate of 21.41 per 1,000 of the population. This compares with a rate of 23.3 for 1947. The number of marriages registered in 1948 was 3,706, as against 3,847 in 1947.

The general death rate of 10.29 per 1,000 of the population was the lowest on record for the City and compares favourably with 11.75 in 1947, 11.98 in 1946, and 11.63 in 1945. Table 2 shows the number of deaths from the principal causes, from which it will be seen that heart disease causes the greatest number of deaths whilst deaths from cancer, intra-cranial vascular lesions, pulmonary tuberculosis, pneumonia and bronchitis come next in order of numbers.

Deaths of women from diseases and accidents of pregnancy and childbirth numbered 13, giving a maternal mortality rate of 1.33 per 1,000 live births, compared with a rate of 1.24 in 1947, 2.23 in 1946, and 1.83 in 1945.

The infantile mortality rate was 45.26 per 1,000 live births—the lowest ever recorded for the City—as compared with 60 in 1947, 61 in 1946, and 84 in 1945. The average rate for the past ten years was 84 and it is very satisfactory to be able to record such substantial progress in the reduction of a rate which was formerly at a high level. Whilst the 1948 rate for Belfast was less than half of that of a few years ago (111 in 1943) it is still somewhat higher than the rates obtaining in some County Boroughs in Great Britain of equivalent population. The infantile mortality rate is largely dependent upon the number of deaths of infants under one month of age: in 1948 223 babies of this age died in Belfast, giving a neo-natal mortality rate of 22.89 per 1,000 live births, and accounting for 50.5 per cent. of the total infantile deaths.

Deaths from pulmonary tuberculosis reached a new low record of 269, giving a mortality rate of 0.59 per 1,000 of the population. Deaths from other forms of tuberculosis numbered 57, also a new low record. Turning to deaths from other

infectious diseases, it is satisfactory to note that there was only one death from typhoid fever and none from scarlet fever. There were only four deaths from diphtheria and there is no doubt that immunisation has played a considerable part in the reduction of the incidence and mortality rates of this disease in the past 13 years.

During the year the incidence of notifiable infectious diseases was well below the average. A reference to Table 9 will show that there was a decrease in the number of notifications of nearly all infectious diseases as compared with the previous year. Only 8 notifications of acute anterior poliomyelitis (Infantile Paralysis) were received as against 61 in 1947. Notifications of typhoid fever numbered 5 as compared with 43 in 1947. There was a reduction in the number of notifications of scarlet fever; practically all the cases were of an extremely mild type and many of these were nursed at home. The number of notifications of measles was 2,618 as compared with 6,468 in 1947.

Table 11 shows the number of children known to be immunised against diphtheria. At the end of 1948 it was estimated that only 32% of children under 5 years of age had been immunised. This is far from a satisfactory state of protection against this dangerous disease; it cannot be too strongly emphasised that non-immunised children are in greater potential danger of contracting diphtheria than if no children were immunised. The protected child, whilst himself immune to infection, may carry the causative germ and thus infect non-immunised children.

The end of 1948 brought the Public Health (Infectious Diseases) Regulations (N.I.) 1948, which came into operation on 2nd January, 1949. Many more diseases have been made notifiable and certain diseases which had been notifiable only in Belfast and a few other areas have been extended to the whole of Northen Ireland. With the additional information thus made available it may be possible in time to limit the spread of diseases which, whilst not of a high incidence, are nevertheless important in their effects.

School Health Services

For the first time, the Annual Report on the School Health Services, under the control of Dr. T. F. S. Fulton, is incorporated in my Report. In former years it was part of the Annual Report of the Director of Education. This marks the transfer of the administration of functions relating to the health and well-being of school children from the Education Committee to the Health Committee which took place on 1st April, 1948; it had been evident for some years that the administration of these important health services should be integrated with the other health services provided by the Health Authority. The transfer will facilitate the amalgamation and interchange of staffs and records.

I do not wish to depart from this section without commending the solid work and high achievements, in the face of many difficulties, of the Education Committee and the Director of Education in the building up of the School Health Services over the past 25 years. Thanks to the good offices of the Director of Education there is happy and comradely co-operation between the School Health Services and the teaching staffs of the schools, which might have been more difficult to build up quickly had the School Health Services been brought newly into being under the Health Authority. It augurs well for the future success of these services that this good relationship continues.

Here, as in other sections, the difficulties of recruitment and accommodation present many problems, which are more fully explored in Dr. Fulton's Report, and it is hoped that these may soon be resolved so that these services, so vital to the future citizen in his formative years will not be gravely handicapped.

Housing

Possibly the most urgent problem affecting the health of the community is the acute shortage of housing accommodation in the City. The prevention of sickness and ill-health which undoubtedly arises from overcrowding is beset with many difficulties. The shortage of houses, with resultant overcrowding and subletting of rooms, presents not only a danger to public health but must also cause

considerable psychological strain with the probability of ill-health arising therefrom. The housing question has been so thoroughly discussed and debated on local and national levels that it would serve little purpose to go into it at length in this report; suffice it to say that the needs of Belfast are great in this respect. In addition to the large number of new houses required to provide homes for those who have none of their own, many more will be required to replace "unfit" houses when clearance schemes become feasible.

The Corporation is making every endeavour to expedite the erection of new houses, but is now faced with the fact that building sites within the City are almost entirely taken up. Some means will have to be found for securing suitable lands for the erection of dwelling houses; it is obviously undesirable that the already inadequate open spaces for parks, playing fields and play-centres should be further encroached upon for this purpose.

Sanitary Administration

The report of the Executive Sanitary Officer shows that a large amount of work has been done in the abatement of nuisances. Difficulties in having repairs done to houses, whilst not so serious as in past years, are still in existence. In various parts of the City, many of the older working-class type of houses are steadily becoming outworn and are falling into disrepair because of the difficulty in obtaining materials and skilled labour for repair work. In addition, the cost of maintaining such property in habitable condition is not now an economic proposition and owners are reluctant to do more than the minimum of repair work. In some instances, the grave housing shortage resulted in families taking possession of disused huts and condemned houses, thus endangering the health of themselves and their children, and, in the case of former military encampments, creating a public nuisance in the neighbourhood.

The work of the Food and Drugs Inspectorate continues to produce a steady improvement in the conditions under which food is stored and sold. Increased powers are available under the new Public Health (Prevention of Contamination of Food) Regulations (N.I.) 1948, which came into operation at the beginning of 1949, and with these powers it is expected that still higher standards will be attained in regard to food premises and food supplies in the years to come.

Port Sanitary Administration

The section dealing with the activities of the Belfast Port Sanitary Authority gives full details of the measures taken to prevent the entry of infectious diseases from foreign ports, the usual work of ensuring the satisfactory sanitary state of vessels entering the port, and the detection of unsound foodstuffs at the point of entry into the Country. An outbreak of cholera in Egypt in February caused special attention to be given to the surveillance of passengers and crews on vessels or aircraft arriving in this country from ports in the vicinity of Egypt.

Although Belfast is rarely the first port of call for vessels arriving from tropical and sub-tropical countries, the speed of modern travel renders it necessary for port health staffs to maintain constant watchfulness lest a case of smallpox or other dangerous disease might be imported. The work of deratisation of ships rarely calls for comment but it may be mentioned that fumigation is now done entirely at week-ends—usually extending from Saturday afternoon to Monday morning.

In this part of my Report I should like to pay tribute to the willing help so freely given to the work of the Port Sanitary Authority by the officers of H.M. Customs, H.M. Immigration Office, the Belfast Harbour Commissioners and the shipping agents.

The work of the environmental health services was little affected by the advent of the new health legislation, at least so far as Belfast was concerned. Whilst this part of the Health Committee's functions has been very little in the public eye in the past two years, it goes on steadily and is of great importance to the health of our City. The smoothly-running machine rarely calls attention to itself and is sometimes forgotten in the hurly-burly of the installation of new machinery; I mention this to emphasise that it is none-the-less necessary.

From the pressing need of housing accommodation it may be pardonable to turn to the pressing need for accommodation for the consolidated services of the Health Committee. The three main parts now comprising the Committee's staffs, which were formerly under the control of three separate Committees of the Corporation, are still in separate localities, in each of which they are so overcrowded as to militate against efficient working. The difficulties of administrative control and co-ordination of these scattered sections are so great as to make it worth considerable effort to rehouse them centrally; it is hoped that this desirable achievement is not far distant in time. Expansion of our newer services is impossible without additional accommodation; provision of that requirement in piecemeal fashion will in the not so long run prove more expensive and inefficient than a concerted effort to provide adequate centralised offices. Amongst the changes which have occurred as a corollary of the establishment of statutory Health Committees is the relieving of Medical Officers of Health of the burden of administrative detail so that they are more free to concentrate upon the broader professional and technical problems. In Belfast this has been carried to the extent of also relieving the Senior Medical Officers of some of the administrative routine which has heretofore occupied much of their time. The organisation has been formulated; it now remains to provide the accommodation and facilities in which it may operate efficiently and economically.

In conclusion, I should like to take the opportunity of expressing my indebtedness and thanks to the Chairman and Members of the Health Committee for their encouragement and guidance on all occasions during a year in which additional responsibilities were undertaken and many changes occurred, claiming so much of their attention and time. The work of coping with these problems was considerably lightened by the active support and interest of the Members of the Committee. Equally helpful have been the Heads of the other Departments of the Corporation. To the members of my staff I must also express my gratitude for their unfailing loyalty and devotion to duty through a year beset with change and reorganisation.

I have the honour to be,

My Lord Mayor and Gentlemen,

Your obedient servant,

SAMUEL BARRON,
Medical Officer of Health and Port Medical Officer.

TABLE I.

COUNTY BOROUGH OF BELFAST

CAUSES OF DEATH AT DIFFERENT AGE PERIODS

Detailed List Nos.	CAUSES OF DEATH		AGES AT DEATH																														
			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
	Total Deaths (All Causes) ..	M	2,403	60	48	18	27	19	48	44	264	33	10	8	3	318	19	14	25	27	38	41	51	73	114	156	165	238	302	298	294	158	55	13	4
		F	2,281	49	28	20	17	13	28	22	177	24	10	6	4	221	12	6	26	42	36	44	47	62	96	101	116	199	243	339	334	212	110	31	4
1–44	I—Infective and Parasitic Diseases	M	246	..	..	1	..	2	6	11	20	10	3	3	1	37	4	1	12	11	15	17	23	16	17	25	17	20	17	9	4	1	..	..	..
		F	182	..	..	1	2	..	2	7	12	10	3	2	1	28	1	1	15	28	21	25	11	9	10	6	6	6	4	8	3	..	..	..	..
45–57	II—Cancer and other Tumours ..	M	354	..	..	..	..	..	..	..	..	..	1	1	..	2	..	..	1	..	3	2	8	11	22	36	35	52	70	50	40	15	6	..	1
		F	358	..	..	..	..	..	..	..	..	1	2	1	..	4	1	1	1	1	2	3	8	17	23	29	37	54	50	47	44	24	10	2	..
58–71	III—Rheumatism, Diseases of Nutrition and of the Endocrine Glands, other General Diceases and Vitamin Deficiency Diseases	M	27	..	..	1	..	..	1	2	4	..	1	..	..	5	4	3	1	1	..	1	1	..	4	1	2	..	1	2	1	..	..	..	..
		F	42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	1	2	3	2	1	9	5	8	6	1	..	1	..
72–76	IV—Diseases of the Blood and Blood-forming organs ..	M	15	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	..	..	..	1	..	1	2	1	1	1	2	1	..	..	1	..
		F	15	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	2	2	4	3	1	..	..	..	..
77–79	V—Chronic Poisoning and Intoxication	M	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..																						
80–89	VI—Diseases of Nervous System and Sense Organs ..	M	214	..	..	2	..	1	2	3	8	2	1	..	..	11	1	1	1	1	2	3	3	4	6	14	15	28	35	35	33	12	8	1	..
		F	303	..	..	..	2	..	1	2	5	2	..	..	1	8	1	..	..	1	1	1	2	3	18	20	19	40	41	61	51	27	7	2	..
90–103	VII—Diseases of Circulatory System	M	711	..	..	..	..	..	..	1	1	..	..	..	..	1	..	1	1	1	6	8	7	17	29	45	54	77	110	131	119	81	18	5	..
		F	738	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	2	5	4	6	10	18	24	29	35	60	92	136	151	97	56	11	1
104–114	VIII—Diseases of Respiratory System	M	292	1	..	7	10	5	7	18	48	9	2	2	..	61	..	3	2	1	2	3	2	10	12	15	23	27	37	30	36	17	9	2	..
		F	215	..	3	7	6	5	6	9	36	9	..	1	1	47	1	1	3	1	4	1	3	2	6	4	4	12	25	40	27	22	8	4	..
115–129	IX—Diseases of Digestive System	M	121	..	1	..	8	4	24	6	43	6	1	..	..	50	2	..	1	1	2	2	2	3	8	6	9	10	10	2	9	1	2	..	1
		F	92	..	..	2	3	4	10	4	23	..	1	..	..	24	..	1	2	1	2	..	3	3	5	5	7	2	9	10	11	4	2	1	..
130–139	X—Diseases of Urinary and Genital Systems (not Venereal or connected with Pregnancy or the Puerperium ..	M	100	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	2	2	1	1	..	1	3	4	6	9	9	14	25	11	6	3	..
		F	61	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	..	3	3	2	6	4	4	8	6	6	7	5	2	..	..
140–150	XI—Diseases of Pregnancy, Childbirth and the Puerperal State	F	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3	4	3	..	..	..	..	..	..	..	..	..	..	..
151–153	XII—Diseases of the Skin and Cellular Tissue	M	1	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
154–156	XIII—Diseases of the Bones and Organs of Movement ..	M	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..
		F	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..
157	XIV—Congenital Malformations	M	35	5	7	3	5	4	5	1	30	1	..	1	1	33	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
		F	25	2	6	2	2	2	4	..	18	1	1	2	..	22	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
158–161	XV—Diseases peculiar to the first year of Life	M	105	54	40	3	4	2	2	..	105	..	..	..	..	105	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	80	46	19	7	1	2	5	..	80	..	..	..	..	80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
162	XVI—Senility, Old Age ..	M	63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	15	21	14	5	1	2
		F	111	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	14	29	28	24	10	3
163–195 197–198	XVII—Violent or accidental Deaths	M	102	..	..	1	..	1	..	2	4	5	1	1	1	12	5	1	3	9	6	3	4	9	11	4	2	10	6	5	5	6	1	..	..
		F	38	1	..	1	1	..	..	..	3	1	2	..	1	7	4	..	..	1	..	1	..	2	1	2	1	3	3	6	2	4	1	..	..
199–200	XVIII—Ill defined causes of Death	M	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	3	1	2	3	..	..	..	..	..	..
		F	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	2	..	1	..	..	..	..

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Detailed International List Nos.	CAUSES OF DEATH		AGES AT DEATH																																
			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
	I—Infective and Parasitic Diseases																																		
1, 2	Typhoid and Paratyphoid	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Fevers	F	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
3	Plague	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	Scarlet Fever	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	Whooping Cough	M	8	..	..	..	..	..	1	5	6	2	..	..	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	7	..	..	..	2	..	1	2	5	1	1	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	Diphtheria	M	3	..	..	..	..	..	1	..	1	..	1	1	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	1	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	Tuberculosis of the Respiratory	M	143	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	7	11	12	20	13	13	18	9	14	13	4	..	1	..	..	..
	System	F	126	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	12	28	20	21	10	4	9	5	4	4	2	5	1	..	..	..	..	..
14	Tuberculosis of the Meninges and	M	18	..	..	..	..	..	..	3	3	3	2	1	1	10	2	1	1	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Central Nervous System ..	F	11	..	..	..	..	..	..	3	3	3	2	..	..	8	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	Tuberculosis of the Intestines and	M	4	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
	Peritoneum	F	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..
16–22	All other forms of Tuberculosis	M	13	..	..	..	..	..	..	1	1	..	..	..	..	1	..	..	..	4	1	3	1	..	1	..	..	1	1	..	..	..	..	..	..	..
		F	8	..	..	..	..	..	..	1	1	1	..	..	..	2	..	..	1	..	..	1	..	2	..	..	..	..	2	..	..	..	..	..	..	..
24	Purulent Infection and Septicaemia	M	3	..	..	1	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..
	(non-puerperal)	F	3	..	..	1	..	..	..	..	1	..	..	1	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
27	Dysentery	M	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	Malaria	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	Syphilis	M	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	4	5	5	2	2	2	..	..	..	..	..
		F	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	3	1	..	..	..	..	..	1	..	..	..	..	..
33	Influenza	M	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	1	2	1	..	..	..	..	..
		F	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..
34	Smallpox	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
35	Measles	M	6	..	..	..	..	..	2	1	3	2	..	..	..	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	3	..	..	..	..	..	..	1	1	2	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
39	Typhus Fever	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
40–42	Diseases due to Helminths ..	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

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			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
4-7, 11, 12, 23, 25 26, 29, 31 32, 36, 37 38, 43, 44	Other Infective or Parasitic Diseases	M	17	..	..	..	..	2	2	1	5	2	..	1	..	8	1	..	2	..	..	..	1	1	..	2	1	..	..	..	1	..	..	..	..
		F	8	..	..	..	..	..	1	..	1	1	..	1	1	4	..	..	..	..	..	..	..	..	..	1	1	1	..	1	..	..	..	..	..
	II—Cancer and other Tumours																																	
45	Cancer and other Malignant Tumours of the Buccal Cavity and Pharynx	M	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	1	3	5	5	4	1	..	..
		F	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	4	2	1	1	1	..	..	..	..
46	Cancer and other Malignant Tumours of the Digestive System and Peritoneum	M	174	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	2	5	7	12	17	32	35	24	25	5	5	..	1
		F	157	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	11	7	12	20	29	29	22	15	6	2	..
47	Cancer and other Malignant Tumours of the Respiratory System	M	83	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	2	3	8	16	13	14	20	4	2	..	..	..	..
		F	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	1	3	2	2	3	3	2	1	..	..	..
48	Cancer and other Malignant Tumours of the Uterus	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	38	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	6	4	11	3	1	4	2	2	..	..
50	Cancer and other Malignant Tumours of the Breast	M	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
		F	58	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	8	5	7	6	10	4	4	6	4	..	..	..
49, 51-55	Cancer and other Malignant Tumours of other or Unspecified Organs	M	64	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	1	..	4	2	5	5	2	5	8	17	8	5	..	..	..
		F	68	..	..	..	..	..	..	..	..	1	2	1	..	4	..	1	1	1	2	1	1	4	3	6	8	8	9	7	8	2	2	..	..
56–57	Non - Malignant Tumours, or Tumours of Undetermined Nature	M	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	..	4	..	..	..	..	..	..
		F	7	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	1	2	1	..	..	..	..
	III—Rheumatism, Diseases of Nutrition and of the Endocrine Glands, other General Diseases and Vitamin Deficiency Diseases																																	
58	Rheumatic Fever	M	15	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	1	1	..	1	1	..	3	..	1	..	1	..	..	..	..	..	..
		F	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	1	2	..	1	..	1	..	1	..	..	..	..	..	..
59, 60	Chronic Rheumatism and Gout	M	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..
		F	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	1	2	3	..	..	..	..	..
61	Diabetes Mellitus	M	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	..	..	..	..	..
		F	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	5	3	4	3	1	..	1	..	..

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Detailed International List Nos.	CAUSES OF DEATH		AGES AT DEATH																																
			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
63	Diseases of the Thyroid and Parathyroid Glands	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	1	..	..	..	..	..	..
62, 64-66	Other General Diseases	M	5	..	..	1	..	..	1	2	4	..	..	..	..	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
67–71	Vitamin Deficiency Diseases	M	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	IV—Diseases of the Blood and Blood-forming Organs																																			
73	Pernicious and other Anaemias	M	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	..	..	..	1	..	..
		F	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	2	2	2	1	..	..	..	..	..
72, 74-76	Leukaemias, Aleukaemias, and other Diseases of the Blood and Blood-forming Organs	M	10	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	..	..	..	1	..	..	1	1	1	..	1	1	..	..	..	..	..
		F	6	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	2	1	..	..	..	..	..	..
	V—Chronic Poisoning and Intoxication																																			
77	Chronic or Acute Alcoholism	M	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
78, 79	Other Chronic Poisoning	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	VI—Diseases of Nervous System and Sense Organs																																			
81	Non-meningococcal Meningitis	M	5	..	..	..	..	..	..	1	1	1	..	..	..	2	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
		F	3	..	..	..	1	..	..	2	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
82	Diseases of the Medulla and Spinal Cord, other than Locomotor Ataxia	M	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	2	..	..	..	..	..	..	..
		F	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	2	..	2	..	..	..	..	..	..	..	..
83	Intra-cranial Lesions of Vascular Origin	M	176	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	5	12	10	25	32	35	32	12	8	1	..	..
		F	270	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	12	18	18	36	40	60	49	26	7	2	..	..
84	Mental Disorders and Deficiency	M	5	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	1	..	..	..	1	1	..	..	..	..	..	..	..
		F	4	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..
85	Epilepsy	M	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..
		F	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
80, 86, 87	Other Diseases of the Nervous System	M	12	..	..	2	..	1	1	2	6	1	..	..	..	7	..	..	..	..	..	1	..	..	1	..	1	1	1	..	..	..	..	..	..	..
		F	15	..	..	..	1	..	1	..	2	1	..	..	1	4	1	..	..	..	..	1	..	..	1	..	1	2	1	1	2	1	..	..	..	..

TABLE I—*continued*

Detailed International List Nos.	CAUSES OF DEATH		AGES AT DEATH																																
			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
88-89	Diseases of the Eye, Ear and their Annexa	M	2	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	VII—Diseases of the Circulatory System																																		
90	Pericarditis (including Chronic Rheumatic Pericarditis)	M	1	..	..	..	..	..	..	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
92	Chronic Affections of the Valves and Endocardium	M	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	4	4	4	2	..	5	2	2	4	3	5	..	2	1	..	..
		F	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	6	5	9	8	6	6	7	7	6	5	5	1	..	..	..
93	Diseases of the Myocardium including Aneuryism of the Heart	M	350	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	8	10	18	33	58	67	78	61	12	2	..	..	..
		F	410	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	7	8	14	25	43	88	101	71	40	9	1	..
94	Diseases of the Coronary Arteries and Angina Pectoris	M	213	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	10	19	20	26	25	37	39	24	7	1	1	..	..
		F	118	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	10	9	17	21	20	24	12	3	..	..	..
91, 95	Other Diseases of the Heart	M	33	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	1	..	3	..	4	3	3	3	5	4	4	..	..	..
		F	39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	3	2	4	4	..	3	8	3	4	2	2	2	..
97-98	Arterio-sclerosis and Gangrene	M	41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	10	3	12	5	5	2	..	..
		F	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	4	8	9	2	4	..	..
96, 99-103	Other Diseases of the Circulatory System	M	33	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	4	3	4	5	5	3	4	1	1	..
		F	64	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	2	1	..	1	4	4	1	5	6	9	11	8	5	6	..	..	..
	VIII—Diseases of the Respiratory System																																		
106	Bronchitis	M	125	..	..	..	..	..	1	1	2	..	1	..	..	3	..	..	..	..	..	..	..	4	4	8	14	17	24	19	20	6	5	1	..	..
		F	79	..	..	1	1	..	..	..	2	..	..	..	..	2	..	..	1	..	2	..	1	..	2	1	2	5	13	19	15	8	6	2	..	..
107-109	Pneumonia and Broncho-Pneumonia	M	122	1	..	7	9	5	6	16	44	8	1	2	..	55	..	..	1	1	2	1	2	4	2	4	3	5	7	7	14	9	4	1	..	..
		F	102	..	3	4	5	5	6	9	32	8	..	1	1	42	..	1	1	..	2	1	1	2	2	1	1	3	7	15	9	12	1	1	..	..
110	Pleurisy (non-tuberculous)	M	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
		F	3	..	..	1	..	..	..	..	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
104,105, 111–114	Other Diseases of the Respiratory System except Tuberculosis	M	44	..	..	..	1	..	..	1	2	1	..	..	..	3	..	3	1	..	..	2	..	2	5	3	6	5	6	4	2	2	..	..	..	..
		F	31	..	..	1	..	..	..	..	1	1	..	..	..	2	1	..	1	..	..	..	1	..	2	2	1	3	5	6	3	2	1	1	..	..
	IX—Diseases of the Digestive System																																		
117	Ulcer of the Stomach or Duodenum	M	25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	4	3	2	4	5	2	2	..	1	..	..	..
		F	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	5	2	4	2	..	..	..	..	..
119	Diarrhoea and Enteritis (under 2 years of age)	M	44	..	..	..	7	4	23	5	39	5	..	..	..	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	22	..	..	2	3	4	9	4	22	..	..	..	..	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE I—*continued*

Detailed International List Nos.	CAUSES OF DEATH		AGES AT DEATH																														
			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
120	Diarrhoea, Enteritis and Ulceration of the Intestines (2 years of age and over)	M	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..
		F	9	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	1	1	..	2	..	..	..	1	1	..	1	..
121	Appendicitis	M	9	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	1	1	1	1	2	..	..	..	..	..	..
		F	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	1	..	2	..	..	..	..	2	..	..	..	..	..
122	Hernia, Intestinal Obstruction	M	20	..	..	..	1	..	1	1	3	..	1	..	..	4	..	..	..	..	..	1	1	1	..	1	4	1	1	..	5	..	..	..	1
		F	14	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	1	..	1	..	..	1	..	2	..	..	..	2	4	1	1	..	..
124	Cirrhosis of the Liver	M	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..
		F	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	1	1	..	..	..	..	..
125-127	Other Diseases of the Liver and Biliary Passages, including Biliary Calculi	M	6	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..	1	1	..	..	..	..	1	..	..
		F	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	2	..	2	3	1	..	..	..	..
115, 116, 118, 123, 128, 129	Other Diseases of the Digestive System	M	11	..	1	..	..	..	..	..	1	1	..	..	..	2	..	..	..	..	..	..	..	1	..	1	1	1	2	..	2	1	..	..	..
		F	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	1	..	1	..	..
	X—Diseases of Urinary and Genital Systems (not Venereal or connected with Pregnancy or the Puerperium)																																	
130-132	Nephritis	M	49	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	2	2	1	1	..	1	3	4	4	7	5	6	5	2	2	1	..
		F	42	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	3	1	1	2	1	3	8	6	5	5	3	..	..	..
133	Other Diseases of the Kidneys and Ureters	M	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
		F	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	3	..	..	..	1	2	1	2	..	..
134	Calculi of the Urinary Passages	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..
135	Diseases of the Bladder, except Tumours	M	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..
		F	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..
136	Diseases of the Urethra, Urinary Abscess, etc.	M	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
137	Diseases of the Prostate	M	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	7	20	8	4	2	..
138, 139	Other Diseases of the Genital Organs (not specified as Venereal or connected with Pregnancy or the Puerperium)	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..

TABLE I—*continued*

Detailed International List Nos.	CAUSES OF DEATH		AGES AT DEATH																															
			All Ages	Under 1 day	1 day & less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total under 1 year	1–	2–	3–	4–	Total under 5 years	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–	90–	95 and upwards
	XI—Diseases of Pregnancy, Childbirth and the Puerperal State																																	
142-145	Diseases and Accidents of Pregnancy	F	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	2	..	..	..	..	..	..	..	..	..	..	..
141	Abortion, without mention of Septic Conditions	F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
140	Post-abortive Infection	F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
147	Infection during Childbirth and the Puerperium	F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
146, 148-150	Other Accidents of Childberth and Diseases of the Puerperium	F	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	2	2	1	..	..	..	..	..	..	..	..	..	..	..	..
	XV—Diseases peculiar to the first year of Life																																	
158	Congenital Debility	M	8	1	3	..	1	2	1	..	8	..	..	..	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	5	1	..	1	..	..	3	..	5	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
159	Premature Birth (still-births excepted)	M	64	45	16	2	1	..	..	..	64	..	..	..	..	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	54	35	12	6	..	..	1	..	54	..	..	..	..	54	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
160	Injury at Birth (still-births excepted)	M	15	5	10	..	..	..	..	..	15	..	..	..	..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	8	3	3	..	1	1	..	..	8	..	..	..	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
161	Other Diseases peculiar to the first year of life	M	18	3	11	1	2	..	1	..	18	..	..	..	..	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	13	7	4	..	..	1	1	..	13	..	..	..	..	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	XVIII—Violent or accidental Deaths																																	
163, 164	Suicide	M	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	..	3	3	3	..	2	..	..	..	1	..	..	..	..
		F	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	..	2	1	..	..	..	..	..	..
170	Automobile Accidents (all motor driven road vehicles)	M	24	..	..	..	..	..	..	..	..	3	..	1	1	5	3	..	..	1	..	..	1	2	2	..	..	3	1	1	1	4	..	..	..
		F	10	..	..	..	..	..	..	..	..	..	2	..	1	3	4	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	..	..	..	..
169, 171-195	Other Accidents	M	62	..	..	1	..	1	..	2	4	2	1	..	..	7	2	1	2	7	4	3	3	4	6	1	2	5	5	4	4	1	1	..	..
		F	22	1	..	1	1	..	..	..	3	1	..	..	..	4	..	..	..	1	..	..	..	1	1	..	..	3	1	4	2	4	1	..	..
165-168, 197-198	Other Violent Deaths	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE II

The principal causes of deaths (in order of importance) were as follows:—

1. Heart Disease	1,281
2. Cancer	696
3. Intra-Cranial Vascular Lesions	446
4. Pulmonary Tuberculosis	269
5. Pneumonia and Broncho Pneumonia	224
6. Bronchitis	204
7. Senile Decay	174
8. Violence	140
9. Premature Births (still births excluded)	118
10. Nephritis	91
11. Diarrhoea and Enteritis	77

TABLE III

Trend of mortality from the four principal causes of death in Belfast from 1939:—

YEAR	Heart Disease	Cancer	Pulmonary Tuber-culosis	Respiratory Tract
1939	1,344	572	365	580
1940	1,387	576	412	840
1941	1,277	570	426	685
1942	995	633	369	546
1943	1,116	613	367	655
1944	1,098	620	354	523
1945	1,130	664	326	517
1946	1,302	682	343	638
1947	1,482	662	281	591
1948	1,281	696	269	428

TABLE IV

Showing the number of deaths at various age periods, the percentage of the total number registered and the death-rates per 1,000 of the various age groups.

Age Group (Years)	Number of Deaths			Percentage of Total Deaths	Death Rate per 1,000 of population of this age group (not standardised)
	Males	Females	Total		
0–4	318	221	539	11.50	11.12
5–9	19	12	31	0.66	0.72
10–14	14	6	20	0.43	0.52
15–19	25	26	51	1.09	1.35
20–24	27	42	69	1.47	1.74
25–29	38	36	74	1.58	1.86
30–34	41	44	85	1.81	2.38
35–39	51	47	98	2.09	3.06
40–44	73	62	135	2.88	4.66
45–49	114	96	210	4.48	8.68
50–54	156	101	257	5.49	12.35
55–59	165	116	281	6.00	15.50
60–64	238	199	437	9.33	24.47
65–69	302	243	545	11.64	39.00
70–74	298	339	637	13.60	65.80
75–79	294	334	628	13.40	120.30
80–84	158	212	370	7.90	188.79
85 and over	72	145	217	4.63	271.25

TABLE V

Shewing the number of Deaths registered as having been caused by Phthisis and Diseases of the Respiratory Organs during the twenty years, 1929-1948.

YEAR	Population	Phthisis	Rate per 1,000	Diseases of the Respiratory System			Total Chest Affections
				Pneumonia	Others	Total	
1929 ..	415,151	485	1.2	680	761	1,441	1,926
1930 ..	415,151	436	1.0	357	482	839	1,275
1931 ..	415,151	452	1.1	518	479	997	1,449
1932 ..	415,151	448	1.1	539	461	1,000	1,448
1933 ..	415,151	429	1.0	583	605	1,188	1,617
1934 ..	415,151	398	0.96	434	421	855	1,253
1935 ..	415,151	389	0.93	597	445	1,042	1,431
1936 ..	436,000	406	0.93	450	373	823	1,229
1937 ..	438,112	414	0.95	503	405	908	1,322
1938 ..	443,500	348	0.78	465	294	759	1,107
1939 ..	443,500	365	0.82	316	357	673	1,038
1940 ..	444,500	412	0.93	404	539	943	1,355
1941 ..	444,500	426	0.96	330	446	776	1,202
1942 ..	444,500	369	0.83	325	298	623	992
1943 ..	425,000	367	0.86	451	291	742	1,109
1944 ..	430,800	354	0.82	315	286	601	955
1945 ..	435,900	326	0.75	274	339	613	939
1946 ..	444,687	343	0.77	338	405	743	1,086
1947 ..	450,000	281	0.62	326	355	681	962
1948 ..	455,020	269	0.59	224	283	507	776

TABLE VI

Showing the number of deaths from Epidemic Diseases during the ten years 1939-1948.

YEAR	Typhoid Fever	Scarlet Fever	Diphtheria	Puerperal Fever	Cerebro-Spinal Fever	Poliomyelitis	Measles	Influenza	Diarrhoea	Dysentery	Whooping Cough
1939	—	7	34	6	5	*	13	50	216	—	35
1940	1	10	85	7	22	1	150	161	316	—	54
1941	—	2	56	3	20	2	—	88	202	—	19
1942	—	—	15	6	13	2	17	18	182	—	9
1943	4	3	10	11	5	3	11	50	310	—	40
1944	—	2	11	4	3	—	1	21	202	1	22
1945	1	2	7	5	2	4	10	16	188	1	26
1946	—	2	2	3	2	3	5	54	127	—	31
1947	7	—	3	1	—	4	42	27	123	1	35
1948	1	—	4	—	—	—	9	10	77	1	15

*Figures of deaths from Poliomyelitis not available in respect of 1939.

No deaths occurred from Smallpox or Typhus.

TABLE VII

Shewing the population, the number of Births, the Birth Rate per 1,000, the number of Deaths, the Death Rate per 1,000, and the natural increase during the twenty years, 1929-1948.

Year		Population	No. of Births	Birth Rate per 1,000	No. of Deaths	Death Rate per 1,000	Natural Increase
1929	..	415,151	8,899	21.4	6,462	15.6	2,437
1930	..	415,151	9,558	22.7	5,451	12.9	4,107
1931	..	415,151	9,470	22.8	5,857	14.1	3,613
1932	..	415,151	8,882	21.4	5,783	13.9	3,099
1933	..	415,151	8,599	20.7	6,318	15.2	2,281
1934	..	415,151	9,086	21.9	5,676	13.7	3,410
1935	..	415,151	8,848	21.3	6,238	15.0	2,610
1936	..	436,000	9,242	21.2	6,207	14.2	3,035
1937	..	438,112	9,150	20.9	6,341	14.5	2,809
1938	..	443,500	9,146	20.6	6,069	13.7	3,077
1939	..	443,500	8,966	20.2	5,758	12.9	3,208
1940	..	444,500	8,704	19.6	6,583	14.8	2,121
1941	..	444,500	8,383	18.9	6,641	14.9	1,742
1942	..	444,500	9,659	21.7	4,973	11.2	4,686
1943	..	425,000	10,713	25.2	5,511	13.0	5,202
1944	..	430,800	10,456	24.3	5,176	12.0	5,280
1945	..	435,900	9,853	22.6	5,069	11.6	4,784
1946	..	444,687	10,327	23.2	5,326	11.9	5,001
1947	..	450,000	10,505	23.3	5,289	11.7	5,216
1948	..	455,020	9,744	21.41	4,684	10.3	5,060

TABLE VIII

Shewing the number of deaths from Cancer and other Tumours for the year 1948, as compared with the preceding five years.

Year	Under 1	1 2	2 3	3 4	4 5	5 10	10 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 75	75 80	80 85	85 90	90 and over	M	F	Grand Total
1948	—	1	3	2	—	1	1	2	1	5	5	16	28	45	65	72	106	120	97	84	39	16	3	354	358	712
1943	—	1	—	2	—	1	2	1	1	4	7	16	25	49	68	66	98	106	103	58	20	5	2	287	348	635
1944	—	—	—	1	1	2	—	3	3	8	13	17	29	46	54	76	100	108	91	57	19	6	3	315	322	637
1945	1	—	1	—	—	4	1	4	5	2	10	13	36	52	45	69	95	97	126	78	40	9	—	323	365	688
1946	—	—	3	—	1	1	2	1	4	2	8	19	20	48	48	69	99	129	130	75	28	10	4	340	361	701
1947	1	1	2	—	—	4	3	3	4	5	6	13	37	59	67	65	97	97	117	73	32	6	3	348	346	694
Totals	2	2	6	3	2	12	8	12	17	21	44	78	147	254	282	345	489	537	567	341	139	36	12	1,613	1,742	3,355

It will be seen from the above table that the average number of deaths registered annually as having been caused by Cancer and other Tumours during the quinquennial period 1943 to 1947 was 671 (323 males and 348 females).

It should be noted that the above Table includes non-malignant tumours and tumours of undetermined nature.

TABLE IX

Showing by age periods and sexes the number of cases of Infectious Diseases notified, pursuant to the Infectious Disease (Notification) Act, 1889.

DISEASE	Under 1 Year		1 Year and under 2 Years		2 Years and under 5 Years		5 Years and under 10 Years		10 Years and under 15 Years		15 Years and under 25 Years		25 Years and under 45 Years		45 Years and upwards		Age unknown		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Typhoid Fever ..	..	..	..	1	..	..	..	..	..	1	1	..	..	1	..	1	..	1	6
Scarlet Fever ..	3	4	17	18	138	122	210	230	57	76	20	19	8	4	2	3	..	..	931
Puerperal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4
Diphtheria ..	3	..	2	3	20	16	17	10	6	7	10	8	1	3	..	1	..	..	107
Erysipelas ..	..	..	1	..	1	..	2	..	1	..	3	4	12	14	32	35	1	2	108
Cerebro-Spinal Meningitis	3	..	3	1	3	4	1	2	..	1	..	3	3	..	1	..	..	..	25
Poliomyelitis ..	..	..	..	..	1	1	1	..	..	..	1	..	..	4	..	..	..	..	8

No cases of Typhus Fever, Simple Fever, Smallpox, Relapsing Fever, Membraneous Croup or Encephalitis Lethargica were notified during the year.

MEASLES - 2618 Cases notified

WHOOPING COUGH 666 „ „

TABLE X

Shewing the number of cases of infectious diseases notified during the ten years 1939-1948, pursuant to the Infectious Disease (Notification) Act, 1889.

	Typhoid Fever	Scarlet Fever	Diph-theria	Cerebro-Spinal Meningitis	Polio-myelitis	Puerperal Fever	Erysipe-las
1939 ..	20	1696	686	12	5	7	134
1940 ..	17	1266	1165	166	2	9	115
1941 ..	44	453	683	246	7	3	83
1942 ..	10	778	427	122	5	12	82
1943 ..	29	1964	322	75	2	2	60
1944 ..	5	1679	217	48	5	5	67
1945 ..	14	768	213	39	20	1	76
1946 ..	13	753	220	39	8	1	95
1947 ..	43	1144	115	24	61	1	77
1948 ..	6	931	107	25	8	4	108

Infectious Diseases

SCARLET FEVER

931 cases were notified during the year, but on investigation 43 were found not suffering from the disease, which made the total number that occurred during the year 888, an attack rate of 1.9 per 1,000 of the population.

The number of cases which occurred during the preceding year was 1,144, and the average number notified annually during the ten years 1938-1947 was 1,260

No deaths occurred during the years 1947-1948. The average number annually during the ten years 1938-1947 was 4.

DIPHTHERIA

107 cases were notified, but on investigation 20 were found not suffering from the disease, which made the total number that occurred during the year 87, an attack rate of 0.19 per 1,000 of the population

The number of cases that occurred during the preceding year was 115, and the average number notified annually during the ten years 1938-1947 was 471.

4 deaths occurred, equivalent to a case-mortality rate of 4.6 per cent., or a death rate of 0.008 per 1,000 of the population. The number of deaths in the preceding year was 3, and the average number annually during the ten years 1938-1947 was 23.

TYPHOID FEVER

6 cases were notified during the year, but on investigation 1 was found not suffering from the disease, which made the total number that occurred during the year 5, an attack rate of 0.01 per 1,000 of the population.

The number of cases which occurred during the preceding year was 43, and the average number notified annually during the ten years 1938-1947 was 20.

1 death occurred during the year. 7 deaths occurred in the preceding year; the average number annually during the ten years 1938-1947 was 1.

ERYSIPELAS

108 cases were notified during the year. The number of cases that occurred in the preceding year was 77, and the average number notified annually during the ten years 1938-1947 was 90.

CEREBRO-SPINAL FEVER

25 cases were notified during the year, 4 of which were found not suffering from the disease, making the total number of cases that occurred during the year 21, an attack rate of 0.04 per 1,000 of the population. No deaths occurred during the years 1947-1948. The average number occurring annually during the ten years 1938-1947 was 8.

POLIOMYELITIS

8 cases were notified during the year, an attack rate of 0.01 per 1,000 of the population.

The number of cases which occurred during the preceding year was 61, and the average number notified annually during the ten years 1938-1947 was 12.

No deaths occurred during the year. The number of deaths in the preceding year was 4, and the average number annually during the eight years 1940-1947 was 2.

MEASLES

2,618 cases of measles were notified during the year.

The number of cases that occurred during the preceding year was 6,468.

9 deaths occurred during the year, 42 occurred in the preceding year, and the average number annually during the ten years 1938-1947 was 47.

WHOOPING-COUGH

666 cases of whooping-cough were notified during the year.

The number of cases notified during the preceding year was 821.

15 deaths were caused by whooping-cough. In the preceding year the number of deaths from this disease was 35, and the average number annually during the ten years 1938-1947 was 32.

DIARRHOEA AND ENTERITIS

77 deaths were caused by diarrhoea and enteritis during the year, equivalent to a death rate of 0.16 per 1,000 of the population. Of this number 66 were children under two years of age.

123 deaths occurred during the preceding year and the average number annually during the ten years 1938-1947 was 202.

PUERPERAL FEVER.

4 cases of this disease were notified. The number of cases notified during the preceding year was 1, and the average number notified annually during the ten years 1938-1947 was 6.

EPIDEMIC DISEASES

117 deaths were caused by epidemic diseases during the year, equivalent to 2.5 per cent. of the total number of deaths from all causes, or a death rate of 0.2 per 1,000 of the population. During the preceding year deaths from epidemic diseases numbered 239, equivalent to 4.5 per cent. of the total deaths, or a death rate of 0.5.

1 or 0.8 per cent., of the total deaths from epidemic diseases were caused by typhoid fever; 4, or 3.4 per cent., by diphtheria; 9, or 7.6 per cent., by measles; 10, or 8.5 per cent., by influenza; 77, or 65.8 per cent., by diarrhoea and enteritis; 1, or 0.8 per cent., by dysentery; and 15, or 12.8 per cent., by whooping-cough.

CORRECTED DIAGNOSIS OF INFECTIOUS DISEASES FOR 1948

1 case of typhoid fever; 43 cases of scarlet fever; 20 cases of diphtheria; 4 cases of C.S.F.; and 4 cases of erysipelas were found not suffering from the disease notified. Of these, 5 cases of scarlet fever and 1 case of erysipelas were found to be suffering from measles. The remainder were found not to be suffering from any infectious disease.

DIPHTHERIA IMMUNISATION

During the Year, 6,756 persons completed a course of treatment against Diphtheria; of these 5,611 were immunised at clinics, schools and institutions by the Health Committee's Medical Officers and 1,145 by private practitioners with material supplied by the Department.

In addition 5,011 children received reinforcing injections; of these 4,940 were given by the Health Committee's Medical Officers and 71 by private practitioners.

During the year, 27 primary schick tests were made; of these 10 readings were found to be positive and 17 negative. Three post schick tests were made; all of these were negative.

TABLE XI.

Showing age grouping of children immunised since October, 1936

Age at Date of Inoculation	1936-37	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	
Under 1 Year..	27	21	6	17	33	71	36	69	33	57	72	99	Total under 5 years at end of 1948 **15,617** Equal to 32% of this age-group
1 year ..	362	413	253	299	906	1634	2576	2492	2445	2329	2475	2597	
2 years ..	470	363	204	335	1405	1373	1642	1329	1474	1554	1259	1236	
3 years ..	539	450	205	285	1258	985	1043	628	614	752	517	523	
4 years ..	527	534	268	346	1228	937	997	455	358	514	430	352	
5 years ..	814	690	366	508	1262	929	1022	663	542	557	604	562	Total over 5 and under 10 years at end of 1948 **29,782** Equal to 69% of this age-group
6 years ..	1336	1209	656	818	1408	1123	1133	965	810	691	664	655	
7 years ..	1281	1539	753	756	1356	1017	963	802	678	615	480	360	
8 years ..	905	1233	420	399	995	567	706	492	360	328	263	186	
9 years ..	645	668	223	182	647	315	382	251	170	132	121	61	
10 years ..	506	295	119	88	433	221	222	107	71	75	59	34	Total over 10 and under 15 years at end of 1948 **26,998** Equal to 70% of this age-group
11 years ..	358	127	50	61	200	103	81	44	44	50	32	33	
12 years ..	289	95	29	33	213	85	73	33	18	35	36	17	
13 years ..	192	77	28	22	171	86	78	47	40	27	19	20	
14 years ..	136	62	17	20	141	60	40	26	27	25	23	9	
15 years & over	148	58	24	11	78	180	37	25	67	21	22	12	
TOTAL ..	8535	7834	3621	4180	11734	9686	11031	8428	7751	7762	7076	6756	

VACCINATION AGAINST SMALLPOX

The functions of the Boards of Guardians under the Vaccination (Ireland) Acts, 1863 to 1879, were transferred to County and County Borough Health Committees as from 5th July, 1948, under S.R.O. 1948 No. 171.

During the period 5th July till 31st December, 1948:—

727 children were vaccinated at public clinics by the Health Committee's Medical Officers.

1,506 certificates of successful vaccination were received from general medical practitioners.

174 certificates of insusceptibility of the vaccine disease were received from general medical practitioners.

During the period 1st November till 31st December, 1948, the Vaccination Enforcement Officer paid 555 visits to homes of children in respect of whom no certificates had been received. The results of these visits are as follows:—

(a) Vaccinated by general medical practitioners: evidence of vaccination shown	142
(b) Stated to be vaccinated: no evidence shown ..	19
(c) Not vaccinated	67
(d) Child ill or unfit	111
(e) Child removed from known address ..	86
(f) Child deceased	9
(g) No admission obtained..	118
(h) Other visits	3

TREATMENT OF SCABIES

During the year 973 treatments were carried out at the Scabies clinic at the Disinfecting Station, Laganbank Road.

PORT SANITARY AUTHORITY, BELFAST

Report for the Year 1948

The Corporation of Belfast as the Sanitary Authority was permanently constituted the Port Sanitary Authority for the Port of Belfast by the Local Government Board (Ireland) Provisional Orders Confirmation (No. 4) Act, 1900.

The jurisdiction of the Port Sanitary Authority extends to all that part of the said Port of Belfast which lies on the landward side of a straight line drawn from Blackhead, in the Larne Rural District, to Orlock Point in the Newtownards Rural District, together with the waters of the said Port of Belfast within such limits; and all docks, basins, harbours, creeks, rivers, channels, bays and streams within the aforesaid limits; and the place or places which may from time to time be appointed as the Customs Boarding Station or Stations for such part of the said Port; and the place or places for the time being appointed for the mooring or anchoring of ships for such part of the said Port, under the Authority of the Statutes in that behalf; and for the purposes of any regulations, as aforesaid, shall also extend to any ship which, in pursuance thereof or any direction thereunder, may be moored or anchored at the place appointed thereunder as aforesaid, or which may be on its way thither.

The expenses of the Port Sanitary Authority are contributed by the Urban and Rural Sanitary Authorities in the following proportions:—

The Corporation of Belfast	92%
The Carrickfergus Urban District Council	1%
The Holywood Urban District Council	1%
The Bangor Borough Council	1%
The Belfast No. 1 Rural District Council	1½%
The Belfast No. 2 Rural District Council	1½%
The Larne Rural District Council	1%
The Newtownards Rural District Council	1%

I—AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR

TABLE A

	Number	Tonnage	Number Inspected		Number recorded to be defective	Number of vessels on which defects have been remedied	Number of vessels reported as having had during the voyage infectious disease on board
			By Medical Officer	By Sanitary Officer			
FOREIGN							
Steamers ..	262	524863	17	262	116	105	2
Motors ..	86	124753	4	86	15	14	3
Sailing ..	..	..	..	..	..	..	..
Fishing ..	..	..	..	..	..	..	..
Total Foreign ..	348	649616	21	348	131	119	5
COASTWISE							
Steamers, Motors ..	7179	3248422	10	2003	353	345	18
Sailing ..	..	..	..	..	..	..	..
Fishing ..	..	..	..	..	..	..	..
NON-TRADING							
Steamers ..	359	193908	..	..	..	..	..
Sailing ..	..	..	..	..	..	..	..
Total Coastwise	7538	3442330	10	2003	353	345	18
Total Foreign and Coastwise	7886	4091946	31	2351	484	464	23

II—CHARACTER OF TRADE OF PORT

TABLE B

(a) Passenger Traffic (other than coastwise) during the year 1948

Number of Passengers	Aliens	British	Total	Refused Leave to Land
Inwards by Ship ..	94	261	355	3
Inwards by Aircraft ..	79	2	81	Nil
	173	263	436	3
				Refused Leave to Embark
Outwards by Ship ..	121	173	294	Nil
Outwards by Aircraft ..	12	3	15	Nil
	133	176	309	Nil

(b) Cargo Traffic

Principal Imports—Wheat, Barley, Oats, Linseed, Pollards, Timber, Flax, Ores, Paper, Pulp, Iron, Steel, Slates, Coal, Cement, Fertilisers, Oil, Flour, Bran, Cattle Fodder, Tobacco, Glass, Salt, Fruit, Vegetables, Wines and Ales.

Principal Exports—Machinery, Ropes, Linen, Yarns, Tobacco, Cigarettes, Potatoes, Grass Seed, Butter, Eggs, Pork, Poultry, Rabbits, Apples, Live Cattle, Whiskey and Aerated Waters.

(c) Foreign Ports from which Vessels Arrived

Abadan, 1; Abo, 1; Albafero, 1; Almeria, 1; Amsterdam, 2; Antwerp, 27; Aruba, 6; Bahia Blanca, 3; Bahrein, 1; Baltimore, 3; Balbriggan, 1; Barcelona, 1; Bergen, 1; Biera, 3; Bone, 2; Bordeaux, 1; Bremen, 10; Buncrana, 2; Buenos Aires, 9; Capetown, 1; Casablanca, 1; Constanza, 5; Corpus Christi, 2; Delfzyl, 1; Drogheda, 2; Dublin, 10; Dunkirk 4; Famagusta, 1; Fremantle, 2; Freetown, 1 Gandia, 1; Geelong, 2; Ghent, 42; Gdynia, 1; Gothenburg, 9; Haifa, 1; Hamburg, 15; Hamina, 1; Helsinki, 2; Helsingfors, 1; Huelva, 3; Hobart, 1; Holmsund, 1; Jaffa, 3; Karlsborg, 1; Kotka, 3; Kristianham, 1; Las Palmas, 4; Leghorn, 1; Le Pampi, 1; Lulea, 1; Mantyluto, 1; Monte-Video, 2; Montreal, 15; Melbourne, 1; New York, 15; Newport News, 1; Norfolk, 2; Novorossisk, 1; Nyham, 2; Odessa, 5; Oslo, 1; Ostend, 2; Parrsboro, 1; Pernis, 2; Pernouski, 1; Porsgruin, 1; Port Said, 1; Rafsoe, 1; Reykjavik, 3; Rosario, 1; Rotterdam, 36; Rouen, 7; San Lorenza, 1; San Nicolas, 2; Sandefjord, 1; Sfax, 1; Siglufjord, 2; Singapore, 1; Skien, 1; St. John, 9; Sundsvall, 2; Sydney, 2; Teneriffe, 6; Tel-Aviv, 2; Texas, 1; Trinidad, 2; Three Rivers, 1; Valencia, 2; Vancouver, 3; Weismar, 5; Yjmuiden, 1.

The nationality of the vessels which arrived at the port and were inspected is as follows:—

American, 14; Argentina, 1; Belgian, 2; British, 2,176; Danish, 13; Dutch, 86; Finnish, 3; French, 8; Greek, 1; Italian, 1; Norwegian, 18; Panamanian, 3; Polish, 1; Russian, 1; Swedish, 23.

MEDICAL INSPECTION OF ALIENS

Annual Return by the Medical Inspector of Aliens for the year ended 31st December, 1948

During the year the Medical Inspector under the Aliens Order, (the Port Medical Officer of Health) was requested to medically examine 8 aliens, all of whom were found to be in a satisfactory state of health and were not certified as being "undesirable" for medical reasons.

	Total	Number inspected by the Medical Officer	Number subjected to detailed Medical examination by the Medical Inspector	Lunatic Idiot or M.D.	Undesirable for medical reasons	Physically incapacitated	Suffering from acute infectious disease	Landing necessary for adequate medical examination	Transmigrants
(a) Total number of aliens landing at the Port	173	8	..	..	..	..	..	..	..
(b) Aliens refused permission to land by Immigration Officer	3	..	..	..	..	..	..	..	..
(c) Transmigrants ..	..	..	..	..	..	..	..	..	..
Total Aliens arriving at the Port	176	8	..	..	..	..	..	..	..

Total number of vessels carrying Aliens—23 ships, 5 aircraft. Number of vessels dealt with by the Medical Inspector, 3.

III—WATER SUPPLY (a) and (b) FOR PORT AND SHIPPING

The water supply for the port and shipping is taken from the mains which supply the City and the various districts surrounding Belfast. The supply is controlled by the Belfast City and District Water Commissioners, who have hydrants on all quays and wharves.

The water is subjected to regular chemical and bacteriological examination.

(c) Water Boats: there are no water boats at the port.

IV—PORT SANITARY REGULATIONS (NORTHERN IRELAND), 1948

1. Arrangements for Dealing with Declaration of Health Forms

Declaration of Health Forms as recommended by the Association of Sea and Air Port Health Authorities of the British Isles, are in use at the Port. Special instructions relative to the Port of Belfast are given on the fourth page, and a supply of these forms is distributed to H.M. Customs Officers and the Belfast Harbour Commissioners for the Pilotage Service.

A Declaration of Health Form, signed by the Master and counter-signed by the Ship's Surgeon (where one is carried) is received from each vessel arriving at the port from a foreign port. The Declaration of Health Form is received by the Customs Officer or the Port Sanitary Officer on the arrival of the vessel, and the answers to the questions contained in the Declaration are scrutinised and supplementary questions asked.

In cases where the Customs Officer first boards the vessel and the Declaration of Health is satisfactory pratique is granted.

If the Declaration of Health is not satisfactory the circumstances are immediately reported to the Port Medical Officer, who makes investigations before passengers are allowed to land.

During the year vessels arriving at the port were required to display the appropriate quarantine signals as laid down in these regulations.

2. Boarding of Vessels on Arrival

All vessels arriving from a foreign port are boarded on arrival by an Officer of H.M. Customs and an Officer of the Port Sanitary Authority.

3. Notification to the Authority of Inward Vessels requiring special attention (Wireless messages, land signals stations, information from pilots, Customs Officers, etc.)

Arrangements for the transmission of wireless messages from inward bound vessels, requiring special attention under the regulations, have been made with the shipping companies and agents in Belfast. Under these arrangements the shipping companies receive the wireless message required under Article 7 and forward the information to the Port Medical Officer.

Alternatively, or in addition, wireless messages are received directly by the Port Sanitary Authority; the telegraphic address "Portelth Belfast" having been registered for this purpose.

No land signalling system is in operation. Close co-operation exists between the Port Sanitary Authority and the Officers of H.M. Customs and notification of the arrival of vessels requiring special attention is received from the latter.

4. Mooring Stations Designated under Article 10

(a) Within the docks:—With the concurrence of H.M. Customs and the Belfast Harbour Commissioners, the ordinary places of mooring, discharge, or loading in relation to inward vessels arriving from foreign ports have been designated "mooring stations" within the docks.

(b) Outside the docks:—The outside mooring station is situate at Carrick Roads, about three-and-a-half miles from the nearest point of the docks. Infected or suspected ships, or other ships which may be unhealthy, are required to proceed to established mooring stations.

5. Particulars of any Standing Exemptions from the Provisions of Article 14

Standing exemptions from detention under Article 14 are granted (a) in the case of vessels arriving from a port or seaboard included in the list referred to in Article 11, unless such port or seaboard has been specially referred to in the current list or special instructions have been issued in regard to same: (b) in the case of vessels having on board one of the common infectious diseases, such as scarlet fever, measles, tuberculosis, mumps, diphtheria, whooping-cough, influenza or malaria.

Chickenpox or typhoid are not included in this list; the Port Medical Officer will see cases of these diseases, in case the former might be smallpox and the latter typhus.

During the year 19 contacts of smallpox and 3 of cholera were kept under surveillance at the request of other Sea and Air Port Health Authorities, who notified their expected arrival in Belfast.

6. Experience of Working of Article 16: Restriction on Boarding or Leaving Vessels

In carrying out the provisions of this Article during the year no difficulty arose, and it was not necessary to require passengers to furnish names and destinations, etc., as there were no cases of infectious disease on board any vessel arriving at the port, which required this procedure.

7. Arrangements made for

(*a*) *Premises and Waiting Rooms for Medical Examination*

There are at present no premises set apart as a Customs Examination Hall, waiting rooms and rooms for the medical examination of passengers, as there are no direct passenger sailings from and to this port from foreign ports. The premises which were erected and used for this purpose have been taken over and used as shed for the storage of goods in transit.

Passengers who arrive by direct cargo steamers from foreign ports are examined, if necessary, on board the particular vessel.

(*b*) *Arrangements for Cleansing and Disinfection*

After the removal of a case or cases of infectious disease, disinfection of the vessel is carried out by the Port Sanitary Officer. Clothing and other effects are removed to the Health Committee's Disinfecting Station, Laganbank Road, where they are subjected to steam pressure disinfection. The cleansing of persons is also carried out at this station, where suitable facilities have been provided for this purpose.

(*c*) *Temporary Accommodation*

There is no temporary accommodation for persons for whom such accommodation is required for the purposes of these regulations.

(*d*) *Hospital Accommodation available for Plague, Yellow Fever, Smallpox, and other Infectious Diseases*

The Northern Ireland Hospitals Authority make provision for the reception of cases of infectious disease at the Northern Ireland Fever Hospital at Purdysburn.

Separate premises situated in the hospital grounds, but self-contained and isolated from the other hospital buildings, are available for the reception of cases of smallpox.

(*e*) *Ambulance Transport*

The Port makes use of the facilities provided for ambulance transport in the City by the Northern Ireland Hospitals Authority.

(*f*) *The Supervision of Contacts*

Where contacts of infectious disease are members of the crew, they are kept under supervision by the Port Medical Officer.

In the case of passengers or crew landing, their destinations are ascertained. Should they proceed to a place outside Belfast the Medical Officer of the relevant district is notified.

8. Arrangements for Bacteriological or Pathological Examinations of Rats for Plague

Bacteriological and Pathological examinations of rats for plague are carried out at the Laboratory, Queen's University.

9. Arrangements for other Bacteriological and Pathological Examinations

Other Bacteriological and Pathological examinations are carried out at the Laboratory, Queen's University.

10. Arrangements for the Diagnosis and Treatment of Venereal Diseases among Sailors under International Arrangements

Upon the arrival of vessels in the port, information is given to the Masters as to the arrangements for the diagnosis and treatment of venereal diseases amongst sailors. Pamphlets are left on board which give the location and times of the V.D. Clinics. The pamphlets give warning of the dangers of the disease. Every encouragement is given for attendance at any of the following clinics:-

The Royal Victoria Hospital and the Belfast City Hospital.

At each of these clinics beds are available for intern treatment. No charge is made for intern or extern treatment of patients. When continuation of treatment at other ports is necessary, the sailor's "Grey Book" is filled in by the Medical Officer in charge of the V.D. Clinic, giving full particulars of the treatment he has received.

11. Arrangements for the Interment of the Dead

All arrangements for the interment of the dead are attended to by the shipping companies or their agents.

12. Other Matters, if any, Requiring or Receiving Attention

The infestation of ships by vermin, particularly cockroaches (steam flies) has been receiving attention during the year.

Quite a number of vessels which arrived at the port during the year showed signs of infestation in varying degrees. The Masters were informed and instructed to take the necessary action to eradicate the vermin. Several of the vessels had the infested parts fumigated with hydrogen cyanide whilst others were serviced by a local contractor with good results. Some vessels carry insecticides for the destruction of such vermin: unfortunately these insecticides are often used with poor results as the application is not persistent enough to completely exterminate the vermin, thus resulting in a recurrence of the nuisance.

TABLE C

Cases of Infectious Sickness Landed from Vessels

Disease	Number of Cases during 1948		Number of Vessels concerned	Average Number of cases for previous 5 years
	Passengers	Crew		
Influenza	..	1	1	1
Tuberculosis	17	..	16	7
Chicken Pox	..	3	1	..
Measles	1	..	1	..
Scabies	..	1	1	1

TABLE D

Cases of Infectious Sickness occurring on Vessels during the Voyage, but disposed of prior to Arrival

Disease	Number of Cases during 1948		Number of Vessels concerned	Average Number of cases for previous 5 years
	Passengers	Crew		
Scarlet Fever	..	1	1	..
Chicken Pox	..	1	1	..
Pneumonia	..	1	1	..

No cases of plague, cholera, yellow fever or typhus fever occurred, and no plague infested rats were discovered during the year.

THE PARROTS (PROHIBITION OF IMPORT) REGULATIONS, 1930

During the year a Dutch vessel (M.V. "Antares") arrived at the port with one parrot on board. A notice was served on the Master prohibiting the landing of the bird. The bird was subsequently exported when the vessel sailed from the port.

V—MEASURES AGAINST RODENTS

1. Steps taken for Detection of Rodent Plague

(*a*) *In Ships in Port:* All vessels arriving from ports where plague is endemic are boarded by the Port Sanitary Officer as soon as possible after berthing. Enquiries are made as to the prevalence of rats on board, and as to whether any sick or dead rats were found during the voyage. The vessels are then inspected to ascertain the degree of rat infestation, and are periodically inspected during the time they remain in port, in order to ascertain if any dead rats have been found in the cargo. Traps are set with a view to obtaining rats for bacteriological examination.

(*b*) *On Quays, Wharves, Warehouses, etc., in the vicinity of the Port:* Instructions are given to the owners, occupiers, and employees on the quays that any rats caught or killed should be given to the Port Sanitary Officer who will forward them to the Laboratory, Queen's University for bacteriological examination.

2. Measures taken to Prevent the Passage of Rats between Ship and Shore

All vessels arriving from foreign ports are required to affix ratguards to all moorings, and maintain them so fixed during the time they are in port.

It is also recommended that the gangway, or any other communication with the shore should be raised at least eighteen inches from the ground.

3. Method of Deratization of Ships, etc.

(*a*) *Ships:* Deratization of ships is carried out by fumigation with hydrogen cyanide. The fumigation is carried out by contractors, under the supervision of the Port Sanitary Officer; the minimum concentration being two ounces per thousand cubic feet with a minimum of two hours exposure. A longer period of exposure is more desirable.

(*b*) *Premises in the Vicinity of the Docks, Quays, etc.:* The various shipping companies, warehousemen, and occupiers of premises in the vicinity of the docks, carry out, at the request of the Port Medical Officer, such works as may be necessary for the extermination of rats. Notices are issued, if necessary, under the Rats and Mice (Destruction) Act, 1919, and are served on the occupiers of the premises. Cats are kept in most of the stores and warehouses. Trapping and poisoned baits are also employed.

During the year the Belfast Harbour Commissioners renewed their contract with a local firm who are engaged in rat and pest disinfestation. This firm has been putting down poisoned baits in the sheds and on the lands under the jurisdiction of the Commissioners with effective results and a marked reduction in the rat population.

4. Measures taken for the Detection of Rats in Ships and on Shore

(*a*) *On Ships:* Vessels arriving in the port are inspected by the Port Sanitary Officer, who ascertains whether or not they are infested with rats, and if so to what extent.

(*b*) *On Shore:* Stores in the vicinity of the docks are inspected regularly for the detection of rats. Damage caused by rats to goods in stores was very small during the year.

5. Rat Proofing

(*a*) *Extent to which Docks, Wharves, Warehouses, etc., are Ratproof*

The docks and wharves on the County Antrim side of the port are so constructed as to be as nearly ratproof as possible. The floors of the sheds and warehouses, and the roadways leading thereto, are constructed of concrete, or granite setts laid on concrete.

On the County Down side the wharves are mostly erected on piles, and these afford a certain amount of harbourage, but as these wharves are used principally for the discharge of coal, ores, steel, etc., they are not so attractive to rats as those wharves where grain and foodstuffs are landed and stored.

(*b*) *Action to Extend Ratproofing*

1. In Ships—Efforts are directed towards sealing vulnerable places such as provision stores and pantries where food is kept. This is generally done by encasing with sheet metal and closing the means of access of rats between one apartment and another, so as to make them as ratproof as possible.

2. On Shore—Periodical inspections are made by the Port Sanitary Officer to see that the various premises in the vicinity of the docks are kept in good condition.

Most owners and occupiers of the premises are aware of the damage caused by rats to merchandise, and take every precaution to prevent the access of rats to their premises. Where no such precautions are taken, notices under the Rats and Mice (Destruction) Act, 1919, are served on the owners or occupiers concerned.

NUMBER OF RATS DESTROYED DURING THE YEAR

TABLE E

(1) On Vessels

Number of Rats	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total in Year
Black	29	24	63	18	9	90	15	23	28	19	26	10	354
Brown ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Species not recorded	..	..	..	..	..	..	..	..	..	..	..	..	..
Examined ..	20	16	40	18	9	47	13	23	20	16	20	10	252
Infected with plague	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE F

(2) In Docks, Quays, Wharves, Warehouses

Number of Rats	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total in Year
Black	15	13	18	10	11	11	25	23	24	10	10	12	182
Brown ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Species not recorded	..	..	..	..	..	..	..	..	..	..	..	..	..
Examined ..	15	13	18	10	11	11	25	23	24	10	10	12	182
Infected with plague	..	..	..	..	..	..	..	..	..	..	..	..	..

The number of rats destroyed in the docks, quays, wharves, etc., as recorded in Table F above refers to those which came to the notice of the Port Sanitary Officers.

The sheds and stores on the Harbour Commissioners estates are baited regularly by a firm of contractors employed by the Harbour Commissioners, for the destruction of rats, but the number of rats destroyed is not available, as no estimate is given by the contractors.

Owing to the intensive baiting the number of complaints regarding damage by rats to merchandise in the sheds, etc., is very small, and the number of baits left untouched would indicate that the rat infestation is very limited.

TABLE G

Measures of Rat Destruction on Plague "Infected" or "Suspected" vessels, or vessels from plague infected ports arriving in the port during the year.

Total Number of such Vessels Arriving	Number of such Vessels Fumigated with S.02	Number of Rats Killed	Number of such Vessels Fumigated with HCN	Number of Rats Killed	Number of such vessels on which Trapping Poisoning etc., were Employed	Number of Rats Killed	Number of such Vessels on which Measures of Rat Destruction were not Employed
18	..	. . .	1	10	6	34	11

TABLE H

Deratization Certificates and Deratization Exemption Certificates issued during the year.

Nett Tonnage	Number of Ships	No. of Deratization Certificates Issued				Total	No. of Deratization Exemption Certificates Issued	Total Certificates Issued
		After Fumigation with			After Trapping Poisoning etc.			
		HCN	Sulphur	HCN and Sulphur				
Ships up to 300 tons ..	2	..	..	..	..	..	2	2
Ships from 301 to 1000 tons ..	18	2	..	..	..	2	16	18
Ships from 1001 to 3000 tons ..	6	4	..	..	..	4	2	6
Ships from 3001 to 10,000 tons	22	6	..	..	..	6	16	22
Ships over 10,000 tons ..	3	3	..	..	..	3	..	3
TOTAL ..	51	15	..	..	..	15	36	51

VI—HYGIENE OF CREWS SPACES

TABLE J

Classification of Nuisances

Nationality of Vessel	Number inspected during 1948	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British ..	2176	24	52	409
Other Nationalities	175	4	5	28

Defects found were as follows:—

	British	*Other Nationalities*
Defective Portlights	26	1
Defective Scupper Pipes	12	—
Defective Decks over Forecastle	4	—
Defective waterclosets	2	—
Defective Heating Stoves	2	3
Defective flushing to watercloset	4	1
Defective floors in galley	2	—
Defective ventilation to Crews' quarters ..	6	4
Defective flooring to waterclosets ..	2	—
Defective domestic water supply to crews' space	1	—
Defective Outlet Valve to water closet ..	1	—
Defective wastepipes to wash basins ..	4	—
Defective stanchions to bunks	1	—
Defective washhand basins	2	—
Defective seats to waterclosets	2	—
Defective bulkhead in crews' space ..	1	—
Defective galley stove	1	—
Defective flue to heating stove	1	—
Verminous bedding	2	—
Dirt, vermin and general uncleanliness ..	409	28

During the year it was found that the cleanliness of the officers' and crews' accommodation had maintained its usual fairly high standard, except in the case of a few of the older ships where facilities are inadequate. In some of these cases, particularly where the crews do not change ship frequently, the individual appears to take a keener interest in the cleanliness of his quarters and personal hygiene. It is suggested that the employment of a greater number of "Peggys" would tend to raise the standard of cleanliness to a much higher level.

VII—FOOD INSPECTION

1. Action taken under the Public Health (Imported Food) Regulations, 1937, the Public Health (Imported Milk) Regulations, 1937, and the Public Health (Preservatives, etc., in Food) Regulations, 1927-1940.

During the year all sheds and warehouses at the port where food is landed or stored were inspected regularly for the detection of unsound food. The quality of the food which arrived at the port during the year maintained a very high standard.

Seizures

	cwts.	qrs.	lbs.
1 Keg of Pickled Pork	1	0	0
1 Keg of Pickled Pigs Trotters ..	0	2	9
1 Keg of Sausages	0	3	16
1 Chip of Mushrooms	0	1	2
4 Chips of Pears	1	0	0
2 Tins of Hams	0	1	2
2 Tins of Luncheon Meat	0	0	3
Total ..	4	0	4

No milk is imported, but large quantities of fresh milk are exported to cross-Channel Ports by the Ministry of Agriculture for Northern Ireland.

2. Shellfish—Information respecting any shellfish beds or layings within the jurisdiction of the Port Sanitary Authority, stating whether they are, in the opinion of the Port Medical Officer, liable to pollution.

There are no layings of shellfish within the jurisdiction of the Port Sanitary Authority.

Report on any action taken under the Public Health (Shellfish) Regulations, 1936, or the Sale of Food and Drugs Acts (N.I.).

Under the Belfast Corporation Act, 1930, it is an offence to gather any shellfish within the jurisdiction of the Port Sanitary Authority.

No legal proceedings were instituted under this act during the year.

Bacteriological Examinations

No bacteriological examinations were carried out during the year.

REPORT OF THE EXECUTIVE SANITARY OFFICER

To

The Medical Officer of Health.

Sir,

I beg to submit my report on the sanitary administration of the City for the year 1948.

The large number of complaints received regarding structural and sanitary defects in dwelling houses necessitated concentration by the district sanitary officers upon this important branch of work. Shortage of certain building materials caused delay in securing repairs and renewals, but the position became somewhat easier towards the end of the year, when a number of materials were removed from control.

During 1948 additional duties were imposed upon the staff as follows:—

Enforcement of Section 22, Shops Act (N.I.), 1946, relating to the arrangements for health and comfort of persons employed in shops; under Section 30, Medicines, Pharmacy and Poisons Act (N.I.), 1945, relating to the registration of persons licensed to sell certain poison for agricultural and horticultural purposes; By-Laws made under Section 2, Hairdressers Act (N.I.), 1939, which provide for a better standard of hygiene in premises where the business of barber or hairdresser is carried on.

Sewerage and Sewage Disposal

All areas of the City, with the exception of isolated premises on the outskirts, are connected with the sewerage system. Sewage is collected by means of high and low level main sewers and discharged into the outfall works situated adjoining Belfast Lough. It is screened and passed through detritus chambers before entering the sedimentation tanks. Sludge from the sedimentation tanks is pumped to a sludge steamer and is taken to sea and deposited in deep water outside a line drawn between Blackhead and Orlock Point. The effluent from the sedimentation tanks goes to the storage ponds and is discharged during the first three-and-a-half hours of ebb tide at a point one mile from shore. The system of sewerage and sewage disposal is under the control of the City Engineer and Surveyor and functions efficiently.

Refuse Collection and Disposal

This service is carried out by the City Surveyor's Department by direct labour, and there are approximately 127,000 ashbins in use in the City. Apart from holiday periods, ashbins are emptied on a weekly basis, while in the City Centre a daily service exists. During the year the supply of new ashbins was reasonably good and these can be obtained by the public from the Corporation on terms of hire.

Refuse is disposed of mainly by tipping in areas geographically selected to facilitate efficient operation of the scheme. A small portion is dealt with at the Refuse Destructor, Laganbank Road. From April until September tipping areas and ashbins were treated with D.D.T. liquid insecticide in order to reduce fly-breeding.

Good co-operation exists between this Department and the Cleansing officials on matters affecting public health, and the service has improved considerably since the war with the additional supplies of ashbins available. Details of action taken by the Sanitary Officers under Belfast Corporation Act, 1930, will be found under the heading "Provision of Ashbins."

Water Supplies

Control of the public water supply is vested by Act of Parliament in the Belfast City and District Water Commissioners, who supply all domestic water, with the exception of a few houses on the outskirts of the City. The supply is derived from three main catchment areas:—

1. The Mourne Supply from the Mourne Mountains about 40 miles from Belfast;

2. The Woodburn (Carrickfergus) Supply, Co. Antrim;

3. The Stoneyford Supply about 10 miles from Belfast.

Routine bacteriological examinations of all waters were made by Professor W. J. Wilson, B.A., M.D., D.Sc., D.P.H., Director of Water Examinations to the Water Commissioners, and a copy of the analysis and results were submitted monthly to the Medical Officer of Health for his information. In addition five samples were taken from premises in the City by the Sanitary Officers and submitted to the Municipal Laboratory for bacteriological examination. The quality of the water supplied during the year was satisfactory.

SANITARY SECTION

PROCEEDINGS UNDER THE PUBLIC HEALTH ACTS

Nuisances

Complaints received	41,151
Nuisances discovered	24,219
Total number of inspections made in respect of nuisances	133,791
Number of notices issued	26,514
Number of sanitary improvements carried out	41,431
Summonses issued	1,264
Court Orders obtained	50
Disobedience Summonses issued	4

By-Laws made under Section 23, Public Health (Amendment) Act, 1890. (Relating to keeping Water Closets supplied with sufficient water for flushing).

Number of notices issued	266
Number of summonses issued	18

Keeping of Animals

Number of stables	328
Total number of inspections	3,795
Number of piggeries	121
Total number of inspections	2,107

Offensive Trades

Number of trades on register, 31st December, 1948	11
Total number of inspections	227
Breaches of By-Laws	Nil

Atmospheric Pollution

Proceedings re black smoke, other than from private dwelling houses:—

Approximate number of chimneys	252
Timed observations taken	567
Revealing black smoke over two minutes in half-hour observations	10

Burial Grounds

Number in City	10
Total number of inspections	150
Number of exhumations supervised by the Sanitary Officers	8

In March, 1948, a public enquiry was held by the Ministry of Health and Local Government under Section 162, Public Health (Ireland) Act, 1878 to determine if an order should be made for the discontinuance of burials in Balmoral Cemetery, Stockman's Lane; evidence was given by the Medical Officer of Health.

Cinemas, Theatres

Number in City	43
Number of routine inspections	1,269

In addition to routine inspections concerning cleanliness, sanitary conveniences, etc., special visits are made in connection with the efficiency of ventilating and heating systems. Tests are carried out involving the use of the Kata Thermometer and a hygrometer. If unsatisfactory results are obtained the attention of the management is drawn to same; eight such letters were sent during the year; seven cinemas on being re-tested were found to be satisfactory and the remaining one required repairs to the heating apparatus.

Primary and Intermediate School Buildings

Number in City	132
Total number of inspections	1,286
Defects discovered by Sanitary Officers	78
Complaints from School Health Services investigated	83
Intimations concerning defects sent to Director of Education	69
Intimations concerning defects sent to Managers, etc.	29
Sanitary improvements carried out	71

Miscellaneous Inspections

Tipping grounds—Number in City	14	Total inspections		165
Marine stores — ,, ,,	27	,,	,,	801
Rivers — ,, ,,	15	,,	,,	319
Public Sanitary Conveniences — ,, ,,	70	,,	,,	2,228
(*including those situated in Parks and Playgrounds*)				

Drain Tests

Total number of tests made (including tests under Rodent and Insect Pests Control)	371
Number showing defects	201

Provision of Ashbins (Section 44, Belfast Corporation Act, 1930)

Number of notices served under above Section ..	493
Number of ashbins provided	475
Number of summonses for non-compliance with notice	9

Hairdressers Act (N.I.), 1939

Total No. on register as at 31/12/47 ..	344	
,, registered during 1948 ..	218	
		562
,, deleted during 1948		188
,, on register as at 31/12/48		374
,, of inspections of registered premises ..		1,387
Number of intimations sent re contraventions of By Laws		24

In March, 1948, By-Laws made under Section 2 of the above Act were approved by the Ministry of Health and Local Government. A survey was then made of all premises where the trade or business of barber or hairdresser is carried on. The registration was verified and breaches of the By-Laws noted; reasonable time is being allowed where non-compliance with the By-Laws involves alterations to the premises.

Planning and Housing Act (N.I.), 1931

Owing to the serious shortage of dwelling houses, no surveys were made under the above Act and no houses were represented as unfit for human habitation.

Pupil Sanitary Officers

Five pupils completed their practical training during 1948, four entered for the Sanitary Inspectors Examination of the Royal Sanitary Institute, London, three obtaining their certificates. The number of pupils in the Department on the 31st December, 1948, was eight, which included two ex-Service trainees under the Government Further Education and Training Scheme.

Report on the Administration of the Factories Act (Northern Ireland), 1938

PART 1.—INSPECTIONS for the purposes of provisions as to health including Inspections made by Sanitary Inspectors

PREMISES (1)	Number of		
	Inspections (2)	Written Notices (3)	Occupiers Prosecuted (4)
Factories with mechanical power	1,803	172	15
Factories without mechanical power	457	56	..
† Other premises under the Act (including works of building and engineering construction, but not including outworkers' premises)	644	99	..
† Electrical Stations should be reckoned as factories.			
TOTAL ..	2,904	327	*15

*Includes 7 prosecutions under Public Health Acts and the Regulations made thereunder.

PART 2.—DEFECTS FOUND

PARTICULARS (1)		Number of Defects			Number of defects in respect of which Prosecutions were instituted (5)
		Found (2)	Remedied (3)	Referred to Chief Inspector (4)	
Want of cleanliness (S.1)		52	47	3	5
Overcrowding (S.2)		3	3	..	..
Unreasonable temperature (S.3)		2	2	..	..
Inadequate ventilation (S.4)		25	20	5	..
Ineffective drainage of floors (S.6)		2	1	1	..
Sanitary Conveniences (S.7)	Insufficient	40	37	..	5
	Unsuitable or defective	505	476	..	3
	Not separate for sexes	9	8	..	..
Other offences (excluding offences relating to Home Work which are included in Part 3 of this report) ..		212	186	38	2
Breach of special sanitary requirements for bakehouses (S.56 to S.59)		18	15	..	..
TOTAL ..		868	795	47	15

PART 3.—HOMEWORK

NATURE OF WORK (1)	Number of Inspections of Out-workers' Premises (2)	Outwork in Unwholesome Premises (Section 115)			Outwork in Infected Premises (Sections 116 and 117)		
		Instances (3)	Notices Served (4)	Prosecu-cutions (5)	Instances (6)	Orders Made (S. 117) (7)	Prosecu-cutions (Ss.116 & 117) (8)
1. Making, cleaning, washing, altering, ornamenting, finishing and repairing of wearing apparel ..	608	3	3	..	4	4	..
2. Making-up, ornamenting, finishing, and repairing of table linen, bed linen or other household linen (including in the term "linen" articles of cotton or cotton and linen mixture) ..	485	1	1	..	..	..	..
3. Textile Weaving and any process incidental thereto ..	..	..	..	..	..	..	..
4. Other ..	40	..	..	..	..	..	..
TOTAL ..	1,133	4	4	..	4	4	..

Medicines, Pharmacy and Poisons Act (N.I.), 1945

Number of persons on register	26

Shops Act (N.I.), 1946

Number of inspections under Section 22	2,688
Number of contraventions discovered	78
Number of contravention notices served	49
Number of contraventions remedied	50
Number of exemption certificates issued (in respect of sanitary conveniences or washing facilities) ..	15

Rag Flock Act, 1911

No. of inspections of premises where rag flock is used ..	68
No. of samples submitted to Public Analyst ..	20
No. of samples certified as not being in accordance with the Rag Flock Regulations, 1912	Nil
No. of cautionary letters issued	Nil
No. of prosecutions instituted	Nil

FOOD INSPECTION (excluding Public Abattoir)

During the year this Section was reorganised, a Chief Food Inspector being appointed, also an additional Food and Drugs Inspector, bringing the total staff employed on this work up to six. This has resulted in better supervision over the preparation, storage and sale of food for human consumption and an increase in the number of prosecutions for breaches of the Statutes and Regulations relating thereto. Details of prosecutions are submitted under the heading "Legal Proceedings."

SALE OF FOOD AND DRUGS ACT

Year	Number of samples taken for analysis			Number of samples adulterated			Percentage of samples adulterated		
	Formal	Informal	Total	Formal	Informal	Total	Formal	Informal	Total
1946	825	25	850	17	5	22	2.06	20.0	2.58
1947	962	38	1000	40	1	41	4.16	2.6	4.1
1948	956	59	1015	40	2	42	4.18	3.38	4.13

Return showing particulars of adulterated samples

NATURE OF SAMPLE	Total No. of Samples taken	Adulterations	Prosecutions	Convictions	Fines	Costs
Brandy	3	1	1	1	1 0 0	1 0 0
Buttermilk	36	4	3	3	2 0 0	3 0 0
Hydrogen Peroxide	2	1	1	1	1 0 0	1 0 0
Oil Cooking (inf.)	3	1	—	—	—	—
Ointment, boracic	3	2	—	—	—	—
Salad Dressing	3	3	3	3	1 0 0	3 0 0
Sausages	37	10	3	3	2 5 0	3 0 0
Spice, mixed	7	1	—	—	—	—
Sweetmilk	352	15	13	13	18 15 0	13 15 0
Syrup, essence, flavoured (inf.)	1	1	—	—	—	—
Whiskey	8	3	2	2	2 0 0	2 0 0
TOTAL	455	42	26	26	28 0 0	26 15 0

Cases of Adulteration in which no Legal Proceedings were taken

Formal Samples:

1 of buttermilk, 2 boracic ointment, 7 sausages (6 deficient in meat content reported to the Ministry of Food), 1 mixed spice, 2 sweetmilk, 1 whiskey.

Informal Samples:

1 of flavoured syrup essence, 1 edible oil.

MILK CONTROL

While Sanitary Officers are empowered to inspect cowsheds, dairies and milkshops under The Dairies, Cowsheds and Milkshops Order, (N.I.) 1935, the occupiers of cowsheds and dairies are required to make such reasonable arrangements in regard to the lightning, ventilation, air space, cleanliness, etc., as may be required by the Ministry of Agriculture. Under the Milk and Milk Products Act (N.I.), 1934, licences for producers and distributors are issued only by the Ministry of Agriculture.

Approximate number of producers of milk	15
Approximate number of wholesale dealers	3
Approximate number of retail purveyors	946
Average number of cows in registered premises	416
Number of inspections under Cowsheds, Dairies and Milkshops Order, 1935	2445
Number of samples of milk taken under Sale of Food and Drugs Acts	353

Particulars of Sweetmilk Samples taken during the three years 1946-1948

Year	Number of Samples taken	Number of Samples adulterated	Percentage of Samples adulterated
1946	459	5	1.08
1947	352	7	1.9
1948	353	15	4.24

Particulars of Bacteriological Examinations

TEST	Grade of Milk	Number of Samples Examined	RESULT OF TEST			
			Satisfactory		Unsatisfactory	
			Number	Percentage	Number	Percentage
Plate Count	A	6	6	100	—	—
,, ,,	B	37	36	97.3	1	2.7
,, ,,	B. Pasteurised	165	151	91.5	14	8.5
Coliform	A	6	6	100	—	—
,,	B	37	30	81.1	7	18.9
,,	B. Pasteurised	165	159	96.4	6	3.6
Phosphatase	B. Pasteurised	165	163	98.8	2	1.2
Biological	A	6	6	100	—	—
,,	B	37	35	94.6	2	5.4
,,	B. Pasteurised	104	104	100	—	—

Visits to Shops, Stores, etc., by Food and Drugs Inspectors

Description of Shops, etc.	Number of Visits
Butchers' Shops	1810
Cold Stores	5
Confectioners	1574
Dairies	—
Fish Shops	480
Fried-Fish Shops	681
Fruiterers	1535
Grocers' Shops	4515
Hawkers' Carts	975
Ice Cream Shops	2540
Jam Factories	2
Markets	134
Meat Factories	78
Pork Stores	21
Provision Shops	1397
Railway Termini	—
Restaurants	1320
Wholesale Stores	417
Milkshops	2445
TOTAL	19929

Registration of Factories and Wholesale Premises

(a) Margarine Factories on register .. .. Nil

(b) Wholesale dealers in Margarine on register .. 78

PUBLIC HEALTH ACTS

Unsound foodstuffs inspected by the Food and Drugs Inspectors under the above Acts and destroyed or disposed of otherwise than for the food of man, under their supervision.

Beans	1362 Tins	Syrup	31 Tins
Cereals	22 ,,	Tomatoes	172 ,,
Cocoa	38 ,,	Tomato Paste	2 ,,
Condiments	57 ,,	Treacle	25 ,,
Cheese	1 ,,	Unclassified	128 ,,
Condensed Milk	1172 ,,	Vegetables	2185 ,,
Dried Eggs	8 ,,	Coffee Essence	3 Btls.
Energy Tablets	38 ,,	Fruit Juice	593 ,,
Fish	2059 ,,	Rose-Hip Syrup	324 ,,
Fish Paste	114 ,,	Sauce	17 ,,
Fruit	6090 ,,	Unclassified	3 ,,
Jam	3728 ,,	Meat Extract	294 Jars
Macaroni	34 ,,	Pickles	198 ,,
Malted Food	425 ,,	Cereals	77 Pkts.
Meat	1017 ,,	Gravy Powder	107 ,,
Peas	1853 ,,	Pudding Mixture	102 ,,
Pudding	82 ,,	Unclassified	45 ,,
Soup	768 ,,	Meat Extract	943 Cubes
Spaghetti	72 ,,	Pies	54

	Cwts.	Qrs.	Lbs.
Assorted Foodstuffs	14	1	16
Baking Powder	—	—	24
Biscuits	—	2	26
Butter	—	—	24⅜
Cake Decorations	2	3	—
Cereals	1	0	13
Cinnamon	—	1	1
Confectionery	3	1	6½
Dripping	1	1	12
Fish	7	0	9½
Fruit (Fresh)	—	—	25
Fruit (Dried)	59	1	0⅜
Flour	2	0	9
Margarine	—	—	17
Rabbits	2	2	—
Sausages and Sausage Meat	1	3	8
Sugar	1	0	23
Tea	4	1	27
Vegetables	4	0	17

SALE OF ICE CREAM ACT (N.I.), 1937

	Manufacture	Manufacture and Sale	Sale only		Total
Total No. of premises on register at 31-12-47	5	278	390	673	
Total No. of deletions during 1948	—	40	76	116	
				——	557
Total No. registered during 1948	2	10	84		
					96
Total No. on register at 31-12-48	7	248	398		653

No. of inspections of registered premises	2540
No. of summonses issued for breaches of the Act, By-Laws and Regulations	29
No. of samples submitted for bacteriological examination	283
No. of samples submitted for chemical examination	24

No chemical standard exists at present for ice cream and of the 24 samples examined by the Public Analyst the fat content varied from 2.0% to 7.8%, while the total solids varied from 20.46% to 32.6%.

Particulars of Bacteriological Examinations

Plate Count (283 samples)

Organisms per millilitre	Number of Samples	Percentage of total samples
200,000 or under	226	79.9
Over 200,000 and under 500,000 ..	38	13.4
Over 500,000 and under 1,000,000 ..	10	3.5
Over 1,000,000	9	3.2

Coliform Test (283 samples)

B. Coli	Number of samples	Percentage of total samples
Absent in 1 millilitre	131	46.3
Present in 1 millilitre	38	13.4
Present in 1/10 millilitre	30	10.6
Present in 1/100 millilitre	32	11.3
Present in 1/1000 millilitre	52	18.4

During the year ice cream was imported into the City from England and samples of same examined both chemically and bacteriologically were of good quality and a high standard of cleanliness.

REGISTRATION OF BUTCHERS' SHOPS

Belfast Corporation Act, 1930, Section 43

Total No. of premises on register as at 31-12-47	454	
Total No. of registrations during 1948 ..	21	
	——	475
Total No. of deletions during 1948		101
No. on register at 31-12-48		374
No. of inspections of registered premises		1810
No. of breaches of By-Laws		Nil

RODENT CONTROL

Rats and Mice (Destruction) Act, 1919

No. of surveys made of lands and premises	2302
No. of re-visits and re-inspections	2448
No. of lands, premises, etc., found to be infested ..	295
No. of poison campaigns carried out by Rodent Control Officer .. .. (On request of occupiers who undertook to pay costs)	127
Estimated number of rats killed as result of poison campaigns	1244
Cases where action was taken by occupiers to eliminate rats—	
(a) By professional rat destruction firms	54
(b) By occupiers themselves	86
No. of premises where rat proofing was carried out ..	60
No. of notices served under Rats and Mice (Destruction) Act, 1919	7
No. of summonses issued under Rats and Mice (Destruction) Act, 1919	2

Action taken by District Sanitary Officers re rat complaints:

No. of premises where drains were tested	308
No. of premises where drains were defective on test ..	170

CO-OPERATION WITH OTHER CORPORATION DEPARTMENTS

City Surveyor:

Forty-six poison campaigns were carried out in sewers in the central area of the City bounded by Donegall Quay, Whitla Street, North Queen Street, Upper Library Street, Townsend Street, Durham Street, Sandy Row, Donegall Pass, Cromac Street, Stewart Street, Laganbank Road and Donegall Quay.

Total estimated kill—9605 rats.

Director of Education:

Eight poison campaigns against rats were carried out in six schools.

MOSQUITO CONTROL

From April to the end of August a temporary staff was employed under the supervision of the Rodent and Insect Pests Control Officer. Surveys were made of all potential breeding places and control work, consisting of oiling areas where actual breeding was found, carried out. The Department is indebted to the Electrical Engineer and General Manager of the Electricity Department for a supply of waste transformer and turbine oil, which reduced the cost of the scheme.

Principal types of mosquitoes identified:—

Aedes Detritus, Theobaldia Annulata, Culex Pipiens and Anopheles Claviger.

Miles covered by motor van	1038
Waste transformer and turbine oil used	9760 gallons
No. of surveys of mosquito breeding areas	160

INSECTS OTHER THAN MOSQUITOES

No. of complaints investigated	41

In all cases the source of the complaint was investigated, the type of insect identified and advice given re measures of disinfestation.

LEGAL PROCEEDINGS

		Summonses	Orders	Fines £ s. d.
(1)	Under Public Health Acts:—			
	For abatement of nuisances ..	1264	50	10 3 0
	Under Section 23	18	—	0 10 0
	Exposed for sale unsound food ..	2	—	10 0 0
	Disobedience of Magistrates Orders ..	4	—	13 10 0
(2)	Under Ice Cream Act (N.I.), 1937:—			
	Selling Ice Cream not conforming to standards	8	—	10 0 0
	Name and address not painted on vehicles	5	—	2 12 0
	Stored ingredients in yard in which there was an inlet to drain ..	2	—	2 0 0
	Premises not registered	2	—	2 0 0
	Materials stored in sleeping room ..	1	—	5 0 0
	Failed to cleanse utensils immediately after use	7	—	26 0 0
	Failed to protect ingredients from contamination	4	—	11 0 0
(3)	Under Public Health (Prevention of Contamination of Food) (Belfast) Regulations (N.I.), 1938:—			
	Stored food in room used as sleeping place	2	—	10 10 0
	Failed to take precautions to prevent contamination of food ..	14	—	69 10 0
	Failed to take precautions to secure cleanliness of premises ..	20	—	56 10 0
	Sanitary convenience communicating directly with room in which food was prepared or stored ..	9	—	34 10 0
	Food deposited for sale in room containing W.C.	1	—	1 0 0
(4)	Under Sale of Food and Drugs Acts:—	26	—	23 15 0
(5)	Conveyance of Meat By-Laws:— ..	31	—	52 15 0
(6)	Merchandise Marks Act (1926):— ..	8	—	4 10 0
(7)	Under Belfast Corporation Acts:—			
	Exposed for sale food liable to be contaminated by animals ..	36	—	28 0 0
	Failed to supply a bin	9	—	10 12 0
(8)	Under Factories Act (N.I.), 1938:— ..	8	—	—
(9)	Under Rats and Mice (Destruction) Act, 1919:—	2	—	1 0 0
(10)	Under Food Standards (Salad Cream and Mayonnaise) Order, 1945:—	3	—	1 0 0

I am, Sir,

Your obedient Servant,

W. J. HARRIS,

Executive Sanitary Officer.

RAINFALL FOR THE YEAR 1948

The following table, kindly supplied by the Belfast City and District Water Commissioners, shows the rainfall in inches during the several months of the year.

January	8.38
February	2.97
March	2.69
April	2.27
May	2.90
June	4.77
July	3.06
August	5.62
September	4.74
October	3.95
November	3.31
December	5.42
	50.08

Taken at Oldpark Works, Belfast. Gauge at 203 ft. O.D.

REPORT OF THE CITY VETERINARIAN

On the Work of his Department for the Year 1948

To the Chairman and Members of the Health Committee.

I beg to submit my report on the work at the Belfast Municipal Abattoir in connection with the Ante-Mortem and Post-Mortem examinations of animals slaughtered for human food.

TABLE 1

Shewing by months the number and description of animals slaughtered during the year.

1948	Cows	Heifers	Bulls	Bullocks	Calves	Sheep and Lambs	Goats	Pigs
January	2,141	160	64	3,001	1,839	2,609	701	302
February	1,608	287	101	2,534	1,222	451	704	242
March	1,168	115	62	1,264	1,844	714	449	317
April	447	113	53	959	1,125	1,774	705	388
May	384	73	81	457	67	7,297	606	425
June	862	153	102	992	45	11,126	125	420
July	764	258	89	1,931	199	9,469	109	491
August	1,094	224	80	1,669	617	14,259	182	397
September	1,222	379	74	2,409	1,481	13,012	256	238
October	1,491	751	34	1,674	2,570	14,824	259	318
November	2,175	552	25	1,534	1,624	21,430	580	488
December	1,858	799	70	2,373	1,298	8,967	677	488
TOTALS	15,214	3,864	835	20,797	13,931	105,932	5,353	4,514

Compared with the year 1947, Cattle shew a decrease of 11,526; sheep and lambs an increase of 8,309; pigs an increase of 1,045 and goats an increase of 2,087.

TABLE 2

Shewing the number of carcases condemned from all causes during the year 1948 as being unsound and unfit for human food, as compared with the year 1947

SPECIES	1947	1948
Cows	1,884	977
Heifers	51	51
Bulls	11	6
Bullocks	92	86
Calves	1,226	773
Sheep and Lambs	168	154
Goats	111	140
Pigs	78	93
TOTALS ..	3,621	2,280

The percentage of carcases condemned from all causes at the Public Abattoir during the year 1948 was 1.33 per cent.

TABLE 3

Shewing the different diseased conditions which involved seizure and total destruction of carcases in the Public Abattoir during the year 1948

	CATTLE								
	Cows	Heifers	Bulls	Bullocks	Calves	Sheep	Goats	Pigs	Total
Anæmia	..	1	..	1	..	5	1	..	8
Arthritis	2	..	..	..	..	..	..	2	4
Caseous Lymphaditis ..	..	..	..	..	1	1	..	..	2
Decomposed	..	..	..	..	..	1	..	..	1
Dropsical and Emaciated	194	1	1	8	303	71	134	6	718
Enteritis	1	1	..	1	11	1	..	2	17
Fevered	67	8	..	14	148	46	2	15	300
Fibrosis	..	..	..	1	..	..	..	..	1
Gangrene	1	..	..	4	..	4	..	..	9
Injured	15	2	..	3	4	9	..	2	35
Immature	..	..	..	..	236	..	..	..	236
Jaundice	1	1	..	1	11	2	..	..	16
Joint Ill	..	..	..	..	30	..	..	..	30
Melanosis	2	..	..	..	3	..	..	..	5
Neoplasms	2	..	..	..	..	..	..	..	2
Cancer Sarcoma	15	..	..	..	..	..	..	..	15
Pericarditis..	1	..	..	..	..	..	..	..	1
Pleurisy or Peritonitis ..	13	3	..	2	1	1	..	4	24
Pyæmia	2	..	..	2	..	..	..	1	5
Red Water	7	1	..	3	..	..	..	..	11
Rheumatism	..	..	..	..	..	..	..	..	..
Septicæmia	12	4	..	8	..	4	1	28	57
Septic Mastitis	27	..	..	..	..	..	..	1	28
Septic Metritis	10	1	..	..	..	1	..	1	13
Septic Nephritis	4	..	..	..	..	..	..	..	4
Septic Pneumonia ..	4	1	..	1	10	8	2	12	38
Swine Erysipelas	..	..	..	..	..	..	..	7	7
Tetanus	1	..	..	..	..	..	..	..	1
Tuberculosis	595	27	5	37	15	..	..	12	691
Uræmia	1	..	..	..	..	..	..	..	1
	977	51	6	86	773	154	140	93	2,280

In addition to the above summary, there were 28 tons, 8 cwt., 0 qrs., 12 lbs. of Beef; 15 cwts., 3 qrs., 7 lbs., of Mutton; and 11 cwts., 1 qr., 8 lbs., of Pork seized as being unsound and unfit for human food.

TABLE 4

Shewing comparison between Tuberculosis and other diseases as causes of condemnation of carcases of animals slaughtered at the Public Abattoir during the year 1948.

TUBERCULOSIS

	CATTLE			Sheep Lambs	Goats	Pigs	Total
	Cows	Other Cattle	Calves				
Total Seizure	595	69	15	..	..	12	691
Partial Seizure	136	48	..	..	..	57	241
Total and Partial	731	117	15	..	..	69	932

OTHER DISEASED CONDITIONS

	CATTLE			Sheep Lambs	Goats	Pigs	Total
	Cows	Other Cattle	Calves				
Total Seizure	382	74	758	154	140	81	1,589
Partial Seizure	987	452	7	362	12	126	1,946
Total and Partial	1,369	526	765	516	152	207	3,535

It will be seen from the above table that tuberculosis in cattle is a most fruitful source of total seizure, accounting for about 30 per cent. of the seizures, as compared with other diseased conditions.

TABLE 5

Shewing the percentage by age periods of the animals slaughtered and condemned at the Public Abattoir as suffering from tuberculosis.

SPECIES	BY AGE							
	From one month to one year	Per Cent.	One to three years	Per Cent.	From three to six years	Per Cent.	Over six years	Per Cent.
Cows	..	..	..	..	..	..	595	100
Heifers	1	3.70	26	96.30	..	..	..	..
Bullocks	..	..	19	51.35	18	48.65	..	..
Bulls	1	20	1	20	..	..	3	60
Pigs	12	100	..	..	..	..	..	..
Calves	15	100	..	..	..	..	..	..

TABLE 6

Shewing the percentage by condition of the animals slaughtered and condemned at the Public Abattoir during the year as suffering from tuberculosis.

SPECIES	BY CONDITION							
	Good		Fair		Indifferent		Poor	
	Number	Per Cent.	Number	Per Cent.	Number	Per Cent.	Number	Per Cent.
Cows	8	1.34	168	28.23	223	37.47	196	32.94
Heifers	2	7.40	22	81.48	1	3.70	2	7.40
Bulls	..	..	2	33.33	1	16.66	3	50.00
Bullocks	5	13.51	27	72.97	3	8.10	2	5.40
Calves	..	..	..	..	15	100	..	..
Pigs	12	100	..	..	..	..	..	..

TABLE 7

Shewing the number of Diseased Organs seized and destroyed during the year 1948 as being unsound and unfit for human food (the figures for the preceding year are given for comparison).

	1947	1948	Increase	Decrease
BEEF:—				
Heads	993	904	..	89
Tongues	976	797	..	179
Hearts	721	558	..	163
Lungs	2,288	6,106	3,818	..
Livers	24,320	21,802	..	2,518
Stomachs	1,371	1,085	..	286
Udders	7,160	4,643	..	2,517
Mesenteries & Intestines	1,379	1,167	..	212
Omentum	1,379	1,167	..	212
Diaphragm	79	22	..	57
Kidneys	155	75	..	80
MUTTON:—				
Hearts	12	32	20	..
Lungs	2,288	1,049	..	1,239
Liver	26,727	21,372	..	5,355
Kidneys	20	28	8	..
PORK:—				
Heads	186	78	..	108
Tongues	186	78	..	108
Hearts	76	93	17	..
Lungs	87	161	74	..
Liver	216	170	..	46
Kidneys	6	9	3	..
GOAT:—				
Liver	487	517	30	..
Kidneys	..	..	..	..

The above does not include the viscera of animals totally destroyed.

TABLE 8

Shewing percentage incidence of generalised tuberculosis in animals slaughtered at the Public Abattoir during the year 1948. The percentage for the previous year is given for comparison.

	1947	1948
Cows	4.61	3.91
Other Cattle	.17	.27
Cattle (all classes)	2.11	1.38
Calves	.22	.71
Pigs	.14	1.70

TABLE 9

Table shewing the amount of Beef, Mutton, Pork, etc., presented by the prevention officers of the Ministry of Food and others for examination at the Abattoir.

BEEF—Sides examined, 2; seized and destroyed, 0; Quarters examined, 15; seized and destroyed, 10; Cuts examined, 119; seized and destroyed, 10.

MUTTON—Carcases examined, 5; seized and destroyed, 5.

PORK—Carcases examined, 527; seized and destroyed, 154.

VEAL—Carcases examined, 1; seized and destroyed, 1.

FOWL—Fowl examined, 771; seized and destroyed, 771.

TINNED MEATS—Tinned Meats examined, 1,873; seized and destroyed, 1,873.

TOMATO PUREE—1,651 tins.

FISH AND FOWL MARKETS

Seized or Surrendered

18 tons, 14 cwts., 1 qr., 22 lbs. of Herrings, Kippers, etc.

CYSTICERCUS BOVIS

During the year cysticercus bovis infections were shown to be present to the extent of .12 per cent. of all bovines slaughtered at the Abattoir.

I am of the opinion that this incidence of infestation is probably a good deal higher as one is limited to the number of incisions made in routine inspections.

The distribution of the parasite has been found to be as follows:—

60 per cent. left external masseter muscle.

29 per cent. right external masseter muscle.

9 per cent. both external and internal masseter muscles.

2 per cent. left internal masseter muscle only.

This parasite is of great importance from a meat inspection aspect as it is communicable to man if the meat is eaten in a raw or improperly cooked state, giving rise to the tapeworm "Tænia Saginata."

SERVICES RENDERED TO OTHER DEPARTMENTS

During the year, a general supervision of the health of the animals of the several Committees of the Corporation was exercised. Fortunately most of the work during the year was in the nature of preventive medicine.

ABATTOIR

There are no private Slaughter Houses in the city, so that all animals slaughtered in Belfast for human consumption must be brought to the Public Abattoir.

The Abattoir is situated in Stewart Street, adjacent to the Cattle Market and Cattle Yards.

The Slaughter of Animals Act (N. Ireland), 1932, makes it compulsory for all animals slaughtered for human food to be stunned by means of a mechanically-operated instrument and rendered insensible to pain until death supervenes.

The Abattoir is designed so that the slaughter of cattle, sheep, and pigs is carried out in three different departments. The lairages for the different animals are quite convenient to the killing booths, yet the animals cannot see their fellows being slaughtered. The cooling halls are situated quite close to the slaughter halls and all carcases can be easily conveyed there by means of an overhead rail system.

The cattle slaughter halls are a combination of the open hall and booth system.

The sheep unit consists of two extensive slaughter halls with lairages and cooling halls attached.

The pig unit is equipped with a singeing plant for those users engaged in the Wiltshire Trade.

An extensive cold storage plant is attached to the Abattoir, and during the summer months this is utilised to a great extent by the trade.

According to the By-Laws, all persons employed in the slaughtering and dressing of animals must be licensed and during the year 80 such licences were issued.

All the larger animals at the Abattoir are stunned by means of a Cash Captive Bolt Gun prior to bleeding, and in the case of smaller animals an electrical apparatus known as an Electrolethaler is used.

To my colleague, Dr. Tinsdale, I am again deeply grateful for the considerable amount of laboratory work which he so kindly undertook on my behalf.

To my staff for their loyal support and manner in which they carried out their duties at all times, I say, thanks.

I am,

Mr. Chairman and Gentlemen,

Your obedient servant,

ALEX. McLEAN,
City Veterinarian and Manager of Abattoir.

Municipal Laboratory,
Queen's University
Belfast.

To the Medical Officer of Health.

Dear Sir,

I beg to present a summary of the work carried out at the laboratory during the year 1948.

INFECTIOUS DISEASES

	Pos.	Neg.	Total
Diphtheria.			
1. Swabs from Practitioners	61	1,104	1,165
2. do. Hospitals	442	1,860	2,302
3. do. Public Health Dept. ..	4	57	61
4. Direct Examinations	2	41	43
5. Virulence Tests	14	6	20
Vincent's Angina.			
Swabs	31	179	210
Enteric Group.			
1. Agglutination Reactions	24	125	149
2. Faeces, Blood, etc.	53	144	197
3. Shell Fish	—	—	3
Malaria.			
Blood Films	2	16	18
Food Poisoning.			
Foodstuffs	—	—	9
Tinned Foods	—	—	27
Meningitis.			
1. Cerebro-Spinal Fluids	21	237	258
Tuberculosis.			
1. Sputa	296	496	792
2. Pus	—	54	54
3. Urines	—	—	—
4. Fluids..	2	3	5
Plague.			
Rats	—	—	434
Streptococcal Infections.			
Swabs for Group A Typing	—	—	144
Venereal Diseases.			
Wasserman Reactions (Blood)	263	4,251	4,514
Wasserman Reactions (C.S.F.)	5	17	22
Films for Gonococci	30	139	169
Kahn Reactions	—	—	4,514

MILK EXAMINATIONS

Grade A	6
Grade B	37
Grade B (Pasteurised)	165
Phosphatase Tests	166
Reductase Tests	160
Biological Tests for T.B.	147
Ice Creams	278

WATER EXAMINATIONS

Ordinary Waters	6
Bath Waters	29
Iced Lollipops	14
Lemonades	19

UNCLASSIFIED EXAMINATIONS

Blood Sugars	34
Blood Ureas	29
Blood Films	59
Blood Counts	66
Blood Cultures	47
E.S.R.	406
Urines	174
Paul Burrell	7
Pathological Specimens	6
Other Examinations	300

Yours faithfully,

G. F. W. TINSDALE,

City Bacteriologist.

MATERNITY AND CHILD WELFARE

INFANTILE MORTALITY

During the year 441 children died under the age of 12 months, giving an infantile mortality rate of 45, which is the lowest recorded for the city. The rate for the previous year was 60. There was comparatively little epidemic infection during the year and the weather was generally favourable to the nurture of young infants, both of which circumstances contributed in some measure to the lower rate.

Prematurity, diarrhœa and enteritis, pneumonia, broncho pneumonia and bronchitis accounted for 59 per cent. of the infantile mortality rate.

Table A shows the number of deaths from these conditions and the death rate per 1,000 registered births during the past 10 years.

Table B shows the deaths of infants under one year and the infantile mortality rate during the past 10 years, with an analysis of these deaths and death rates according to different mortality groups.

Table C shows the infant mortality grouped according to causes and sex.

Table D shows the infant mortality by age groups.

NEO-NATAL MORTALITY

The neo-natal rate of 23 was the same as that for the previous year, the lowest recorded for the city. The previous lowest, that for the year 1946, was 27.

Table E shows the neo-natal death and neo-natal death rates during the past 10 years, with an analysis of these deaths and death rates according to different mortality groups.

MATERNAL MORTALITY

The number of women who died from pregnancy, childbirth, and the puerperal state during the year was 13, giving a maternal mortality rate of 1.3 per 1,000 live births. The figure for the previous year, the lowest recorded for the city, was 1.2, and that for the year 1946 was 2.2. The reduction in the last few years is mainly due to a decrease in the number of deaths from infection.

Table F shows the maternal mortality per 1,000 live births analysed according to the cause of death.

NOTIFICATION OF BIRTHS ACT

The total number of births notified occurring in the area during the year was 11,386, and in addition, 18 were either discovered by Health Visitor or notified by the Registrars of Births, making a total of 11,404. Of these 5,736 were males, 5,354 were females, and 314 were still-births.

Classified according to nature of attendance at confinement:-

I. Maternity Services Scheme Cases: (a) with doctor, 1,315; (b) without doctor, 369.

II. Other domiciliary cases: (a) with doctor, 1,649; (b) with midwife alone, 1,083; (c) conducted by outdoor staff of institution, 288; (d) without doctor or midwife, none.

III. Institutional cases: (a) Hospital, 4,811; (b) Private Nursing Homes, 1,308; (c) Other institutions, 581.

HEALTH VISITING

38 Health Visitors were employed whole-time at the end of the year.

Number of visits paid by Health Visitors during the year:-

I. To expectant mothers: First visits, 1,208; Revisits, 1,415; Total visits, 2,623.

II. To children under 1 year of age: First visits, 8,956; Re-visits, 62,199; Total visits, 71,155.

III. To children between the ages of 1 and 5 years: Total visits, 43,072.

ANTE-NATAL CLINICS

No. of centres at end of year provided by Health Authority 13

No. of centres at end of year provided by Voluntary Bodies 1

Total attendance during the year: First visits, 2,332; Re-visits, 10,127.

	1st Visit	Re-Visits
Spier's Place, Shankill Road	223	876
Grovefield School, Mount Street..	156	716
Mersey Street Church Hall	175	770
Glenard Mission Hall	147	593
Mountcollyer Mission Hall	101	490
Co-operative Hall, Frederick Street	171	621
Foresters Hall, Divis Street	148	475
Spier's Place, Shankill Road	208	864
Oldpark Unionist Hall, Avoca Street	169	771
St. Paul's Hall, Hawthorne Street, Falls Road ..	215	900
Foresters Hall, Divis Street	100	505
St. Donard's Church Hall, Bloomfield Road ..	78	444
St. Aidan's Hall, Donegall Road	161	731

CHILD WELFARE CLINICS

No. of centres at end of year provided by Local Authority 26

Attendances

	Under 1 year	Over 1 year
North Belfast Working Men's Inst., Danube Street ..	3,393	1,455
Co-operative Hall, Frederick Street	2,831	709
St. Donard's Church Hall, Bloomfield Road ..	3,730	999
St. Aidan's Hall, Donegall Road	3,140	973
do.	4,315	1,426
Mersey Street Mission Hall	3,369	1,177
St. Paul's Hall, Hawthorne Street, Falls Road ..	3,771	1,699
Spier's Place, Shankill Road (Tuesday)	3,618	865
Havelock Place Mission Hall	3,676	1,282
Glenard Mission Hall	3,114	1,149
Grovefield School, Mount Street (Wednesday) ..	4,438	1,475
Seaview Church Hall, Shore Road	3,077	1,821
Oldpark Unionist Hall, Avoca Street (Wednesday) ..	1,630	728
Forester's Hall, Divis Street (Wednesday)	2,739	958
Ligoniel Mission Hall	2,310	488
Mountcollyer Mission Hall	4,201	1,000
Westbourne Church Hall, Susan Street	4,408	1,895
Kimberley Street Hall	3,434	796
Oldpark Unionist Hall, Avoca Street (Thursday) ..	4,511	1,073
Joanmount (Eglinton) Presbyterian Church Hall ..	2,255	549
St. John's Parochial Hall, Greencastle	2,514	1,065
Spier's Place, Shankill Road (Thursday)	3,313	683
do. (Friday)	3,862	1,483
Sydenham Child Welfare Centre, Strandtown Unionist Hall	4,683	1,478
Forester's Hall, Divis Street (Friday)	3,439	872
Grovefield School, Mount Street (Friday)	5,274	2,225
TOTAL ATTENDANCES ..	90,865	30,323

MOTHER AND BABY HOMES

Ante and Post-Natal Hostels

Name and address of Home or Hostel (1)	NUMBER OF BEDS						Average length of stay	
	Ante-Natal (2)	Post Natal (3)	Labour (4)	Isolation (5)	Maternity (excluding labour and isolation) (6)	Cots (7)	Ante-Natal (8)	Post Natal (9)
(a) Hopedene	4	17	—	1	—	17	1–2 months	2–4 months
(b) Thorndale	18	18	2	3	2	18	6–8 weeks	3 months or longer
(c) Malone Place	1	4	1	2	27	as required	—	56 days

The total number of city cases admitted during the year to these hostels was 427.

All three hostels were in receipt of a grant from the Health Committee.

RESIDENTIAL NURSERIES

Name and address of Nursery	Whether long stay or short stay	Number of Beds provided at the end of year				
		Aged 0–9 mths.	10 mth. 2 years	Aged 2–5	Girls over 5	Boys over 5
Glendhu Hostel Holywood Road (A voluntary Hostel in receipt of a grant from the Health Committee).	Short stay	5	8	7	6	6

HOME HELPS

(a) No. employed at end of year:
I. Whole-time, 53. II. Part-time, 12

(b) No. of cases taken during year:
I. Maternity, 537. II. Others, 240. Total: 777

(c) Average period of assistance:
I. Maternity, 12 days. II. Others, 10 days.

REGISTERED FOSTER MOTHERS

Arrangements for Home Visiting.

Liaison is maintained with the Welfare Authority to insure adequate Health visitation of these mothers.

Maternal Deaths.

(a) Number of women who died in, or in consequence of, childbirth *in the area* during the year:—
(I) From sepsis, 0; (II) From other causes, 13.

(b) Number of women who died:—
(I) At home, 3; (II) In hospital, 9; (III) In other institutions, 1.

INFECTIOUS DISEASES

	(1) Ophthalmia Neonatorum		(2) Pemphigus Neonatorum		(3) Puerperal Fever		(4) Puerperal Pyrexia	
	Dom. Confine-ments	Instit. Confine-ments	Dom. Confine-ments	Instit. Confine-ments	Dom. Confine-ments	Instit. Confine-ments	Dom. Confine-ments	Instit. Confine-ments
Number of cases NOTIFIED during year	7	4	..	..	3	..	6	14
Number of cases visited by Officers of the Local Authority	7	3	..	..	3	..	6	7
Number of cases removed to hospitals	1	..	..	..	2	..	3	..

In eleven of the above cases of Ophthalmia Neonatorum the vision appeared to be unimpaired at the end of treatment, while one case was still undergoing treatment at the end of the year.

DOMICILIARY MIDWIVES

	Domiciliary Midwives	No. in Inst. other than Hospitals	Midwives in Hosps.	Midwives in Nsg. Homes	Total
1. Total number of Midwives practising at the end of the year in the area of the Local Supervising Authority ..	166	13	74	31	284
(a) Employed by the Local Supervising Authority (Part Time)	90				
(b) Employed by Voluntary Associations	4	13			
(c) Solely in private practice	72				

Number of cases in which medical aid was summoned during the year under Section 22 of the Midwives (Ireland) Act, 1918, by a midwife:—

(I) For domiciliary cases, 315; (II) For cases in institutions other than hospitals, 7; total, 322.

Five midwives were suspended for short periods during the year in order to prevent the spread of infection.

REGISTRATION OF NURSING HOMES

	Number of Homes	Number of beds provided for:—			
		Maternity	Others	Dual Purposes	Total
Homes first registered during the year	1				
Homes on the register at the end of the year	34	53	83	154	290

Action during 1948

Number of applications for registration refused ..	—
Number of exemptions granted	—
Number of exemptions withdrawn	—
Number of registrations cancelled	4
Number of appeals by aggrieved persons to a Court of Summary Jurisdiction	—
Number of cases in which fines were imposed ..	—
Number of inspections	416
Number of registered homes not inspected ..	—

The inspections during the year were made by the Assistant Medical Officer, the Superintendent Nursing Officer and the Assistant Superintendent of Midwives.

TABLE A

Showing the number of Deaths of Infants under one year from Prematurity, Diarrhoea and Enteritis, Pneumonia, Broncho-Pneumonia, and Bronchitis.

	1939		1940		1941		1942		1943		1944		1945		1946		1947		1948	
	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births	Deaths	Rate per 1,000 Births
Prematurity ..	149	16.62	194	22.29	159	18.96	187	19.36	240	22.40	211	20.18	155	15.73	132	12.78	107	10.19	118	12.11
Diarrhoea and Enteritis ..	170	18.96	257	29.53	173	20.64	155	16.05	287	26.79	178	17.02	166	16.85	112	10.84	105	10.00	61	6.26
Pneumonia .. .. Broncho-Pneumonia .. and Bronchitis ..	138	15.39	189	21.71	127	15.15	188	19.46	247	23.06	171	16.35	154	15.63	129	12.49	167	15.90	80	8.21

TABLE B

Showing the Deaths of Infants under one year and the Infantile Mortality Rates during the ten years 1939-1948, with an analysis of these deaths and death rates according to Mortality Groups.

Year	Births	Deaths under One Year	Infantile Mortality Rate	Infective & Parasitic Diseases		Diseases of the Nervous System		Diseases of the Respiratory System		Diseases of the Digestive System		Congenital Malformations		Congenital Debility		Premature Birth		Injury at Birth		Other Diseases peculiar to the First Year of Life		Other Causes	
				Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1939	8,966	762	85	42	4.68	42	4.68	148	16.51	181	20.19	61	6.80	78	8.70	149	16.62	12	1.34	23	2.57	26	2.89
1940	8,704	1,065	122	106	12.18	26	2.99	199	22.86	269	30.91	64	7.35	104	11.95	194	22.29	22	2.53	34	3.91	47	5.40
1941	8,383	759	91	38	4.53	33	3.94	131	15.63	185	22.06	62	7.39	73	8.71	159	18.96	15	1.79	21	2.51	42	5.01
1942	9,659	884	92	32	3.31	37	3.83	192	19.88	165	17.08	85	8.80	107	11.08	187	19.36	25	2.59	23	2.38	31	3.20
1943	10,713	1,189	111	81	7.56	39	3.64	255	23.80	300	28.00	84	7.84	73	6.81	240	22.40	26	2.42	58	5.41	33	3.08
1944	10,456	927	89	53	5.07	42	4.02	174	16.64	191	18.27	67	6.41	55	5.26	211	20.18	21	2.01	90	8.61	23	2.20
1945	9,853	828	84	58	5.89	33	3.35	159	16.14	177	17.96	64	6.50	43	4.36	155	15.73	20	2.03	91	9.24	28	2.84
1946	10,327	630	61	41	3.97	22	2.13	138	13.36	116	11.23	56	5.42	29	2.80	132	12.78	22	2.13	52	5.03	22	2.13
1947	10,505	632	60	46	4.38	13	1.23	169	16.09	117	11.14	51	4.85	22	2.09	107	10.19	29	2.76	49	4.66	29	2.76
1948	9,744	441	45	32	3.28	13	1.33	84	8.62	66	6.77	48	4.92	13	1.33	118	12.11	23	2.36	31	3.18	13	1.33

TABLE C

Infant Mortality by Causes and Sex

Causes of Death	Under 1 month				1–11 months			Total under 1 year	
	Males	Females	Total	Rate per 1,000 live births	Males	Females	Total	Total No. of Inf. Deaths	Rate per 1,000 live births
All Causes	126	97	223	22.89	138	80	218	441	45.26
COMMON INFECTIOUS DISEASES									
Scarlet Fever	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	6	5	11	11	1.13
Diphtheria	..	..	..	..	1	..	1	1	0.10
Influenza	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	3	1	4	4	0.41
DIARRHŒAL DISEASES									
Diarrhœa and Enteritis	..	2	2	0.21	39	20	59	61	6.26
TUBERCULOUS DISEASES									
Central Nervous System	..	..	..	..	3	3	6	6	0.62
Intestines and Peritoneum	..	..	..	..	..	..	..	..	..
Other T.B. Diseases ..	..	..	..	..	1	1	2	2	0.21
DEVELOPMENTAL AND WASTING DISEASES									
Cong. Malformations ..	15	10	25	2.57	15	8	23	48	4.93
Premature birth and injury at birth	78	59	137	14.06	1	3	4	141	14.47
Congenital Debility and other Infantile Diseases	19	13	32	3.28	7	5	12	44	4.51
BRONCHITIS AND PNEUMONIA									
Bronchitis	..	1	1	0.10	2	1	3	4	0.41
Pneumonia	8	7	15	1.54	36	25	61	76	7.80
OTHER CAUSES									
Syphilis	..	..	..	..	..	..	..	..	..
Rickets	..	..	..	..	..	..	..	..	..
Meningitis	..	..	..	..	1	3	4	4	0.41
Convulsions	2	..	2	0.21	4	2	6	8	0.82
Suffocation	1	..	1	0.10	1	..	1	2	0.21
Inattention at birth ..	..	1	1	0.10	..	..	..	1	0.10
Miscellaneous Accidents	..	1	1	0.10	2	1	3	4	0.41
Miscellaneous	3	3	6	0.62	16	2	18	24	2.46

TABLE D

Infant Mortality (By Age Groups)

Sex	Under 1 day	1 day and less than 7 days	1–4 weeks	1–2 months	2–3 months	3–6 months	6–12 months	Total	Deaths of illegitimate children
Males ..	60	48	18	27	19	48	44	264	19
Females	48	29	20	17	13	28	22	177	17
Total ..	108	77	38	44	32	76	66	441	36

TABLE E

Showing the Neo-Natal Deaths and Neo-Natal Death Rates during ten years 1939-1948, with an analysis of these deaths and death rates according to Mortality Groups.

Year	Births	Deaths under Four Weeks	Neo-Natal Rate	Diseases of the Respiratory System		Diseases of the Digestive System		Congenital Malformations		Congenital Debility		Premature Birth		Injury at Birth		Other Diseases peculiar to the First Year of Life		Other Causes	
				Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1939	8,966	300	33.46	15	1.67	13	1.45	32	3.57	53	5.91	135	15.06	12	1.34	23	2.57	17	1.90
1940	8,704	350	40.21	18	2.07	15	1.72	32	3.68	27	3.10	181	20.79	22	2.53	32	3.68	23	2.64
1941	8,383	303	36.14	22	2.62	18	2.15	38	4.53	25	2.98	141	16.82	14	1.67	21	2.51	24	2.86
1942	9,659	388	40.17	39	4.04	26	2.69	53	5.49	31	3.21	180	18.64	21	2.17	21	2.17	17	1.76
1943	10,713	624	58.25	72	6.72	118	11.01	57	5.32	38	3.55	226	21.09	26	2.42	53	4.95	34	3.17
1944	10,456	505	48.30	50	4.78	51	4.88	52	4.97	26	2.49	198	18.94	21	2.01	79	7.56	28	2.68
1945	9,853	391	39.68	39	3.96	22	2.23	40	4.06	13	1.32	148	15.02	18	1.82	87	8.83	24	2.44
1946	10,327	277	26.82	18	1.74	6	0.58	35	3.39	6	0.58	126	12.20	22	2.13	51	4.93	13	1.26
1947	10,505	245	23.30	16	1.52	11	1.05	25	2.38	10	0.95	101	9.61	26	2.48	47	4.47	9	0.86
1948	9,744	223	22.86	18	1.84	3	0.30	25	2.56	6	0.61	116	11.90	21	2.15	26	2.67	8	0.82

TABLE F

Showing the Maternal Mortality Rate per 1,000 live births analysed according to the cause of death.

Cause of Death	No. of Deaths	Rate per 1,000 Live Births
Ectopic Gestation	2 ..	0.20
Toxæmia of Pregnancy	3 ..	0.30
Hæmorrhage of Childbirth, etc. ..	5 ..	0.51
Other Accidents of Childbirth ..	3 ..	0.30

TABLE G

Showing the Deaths of Children under one year old per 1,000 births each year from 1929-1948

YEAR	Deaths per 1,000 Births	YEAR	Deaths per 1,000 Births
1929	112	1939	85
1930	78	1940	122
1931	90	1941	91
1932	111	1942	92
1933	102	1943	111
1934	80	1944	89
1935	112	1945	84
1936	101	1946	61
1937	94	1947	60
1938	96	1948	45

HOME HELP SCHEME

At the end of the year 53 home helps were employed full-time and 12 part-time. In all 777 cases were dealt with, of which approximately two-thirds were Maternity cases; these were given priority in the allocation of the home helps. The extent of this service continues to be limited by the number of home helps available and we were only able to assist expectant mothers and mothers of children under 5 years throughout the year.

THE BELFAST VOLUNTARY WORKERS' ASSOCIATION

The members of this Association again rendered valuable assistance at the Child Welfare Centres during the year, and we would take this opportunity of recording our appreciation of their continued interest and help in our work.

ANNUAL REPORT OF THE SENIOR MEDICAL OFFICER FOR SCHOOLS for the Year 1948

During the year some very important changes have taken place. They have resulted from the coming into operation of the Education Act, 1947, and of the Health Services Act, 1948, and from the implementation of policy previously decided upon.

As far back as 1936, it was decided that because the treatment of speech defects had an important part to play in the happiness and employability of quite a goodly proportion of the school population, speech therapy should be made available through the school health services. It was only towards the end of 1948 that we have been able to take this important forward step by the appointment of a speech therapist. It is hoped that we will be able to obtain the services of a second during this current year as the numbers to be treated are very considerable.

Another development in the service was the appointment of a physio-therapist to deal with those pupils needing treatment for postural and other physical defects, which would affect them adversely, when they enter industrial or professional life. In ignorance of their later implication, many of these conditions are accepted as unavoidable, and no effort is made to treat them at a time when the structures involved are less set than in later life. With the coming into operation of physio-therapy in the public health service, attention is bound to be focussed more on such defects and a certain amount of education of the public in such matters will result. This will lead to an increased demand for treatment so that one officer could not undertake all the work requiring to be done.

It had been hoped that audiometric tests to discover minor or commencing deafness would have been made available during the year. The lack of suitable apparatus has held up the inauguration of this work which will be the next practical development in the service. There are many children who suffer from a minor degree of deafness, due to infection, which, while it may not interfere with their education, is evidence of a deficiency which, if treated early, will clear up entirely. If left, it will probably be the precursor of a greater degree of deafness in later life.

The coming into operation of the Education Act (N.I.), 1947, made several significant changes in the work of the service.

Firstly medical and dental inspection became compulsory, with the result that the number of refusals of medical inspection dropped forthwith. In addition there was a considerable reduction in the number who were absent at the time of the medical or dental inspection. In the initial stages, it paid, if necessary, to go back to a school to inspect previous absentees, and this action quickly demonstrated, that absenteeism was an unwise expedient to avoid examination. In time this became less practicable and the absentees will have to be dealt with at subsequent visits.

The second important change was the inclusion of medical and dental inspection as a routine function of all grant-aided schools. This brought in all the voluntary schools previously outside our scheme, the most important being the Grammar schools. In these, except for the boarders, there had been no routine medical inspection. As it was left to the Governors of such schools to formulate their own schemes, time has had to be given for this purpose and there are no statistics available yet for this group.

Another result of the Act was the assumption by the Local Education Authority of the onus to see that free medical and dental treatment was made available to every pupil. Thereby they were empowered to pay for, if necessary, all such treatment. Until the coming into operation of the Health Services Act in July, 1948, it was possible to provide spectacles and all other forms of treatment to any child in need.

With the exception of Child Guidance, the provision of artificial limbs and the cost of the operative treatment for Tonsils and Adenoids in Musgrave Park Hospital, no local hospital has passed on the cost of any treatment they gave, although they were entitled to do so. The immediate effect was to cut off any objection parents might have made on the grounds of the expense. It certainly facilitated the issue of spectacles against which the initial cost or that of repairs was always a big stumbling block.

We had hoped to include in this report the result of an investigation into the incidence of Myopia amongst school children which would have indicated the necessity or otherwise of special educational provision in the form of a day school for such pupils. Although the financial arrangements previously referred to permitted the examination of many more children, the enquiry could not be completed because of the coming into operation of the Health Services Act. Under this the Supplementary Eye Services Regulations permitted the free choice of optician or oculist. This automatically diverted a very large number of prospective patients to other sources of supply and rendered the continuance of the investigation inadvisable.

The regulations had another and much more serious effect. In our opinion, spectacles for children should be prescribed only by those qualified to do so using a mydriatic, the effect of which is to put certain muscles in the eyes at rest and thus permit a correct estimate of the degree of defect present in any particular case. Under the existing scheme every child is not so assessed, and it is felt that quite an appreciable number of children who have obtained spectacles other than through a recognised hospital or medical clinic, may be wearing glasses which are quite unsuitable, which may be causing attenuation rather than improvement in sight and the cost of which is being borne out of public funds.

With the coming into operation of the Health Services Act, the responsibility for the provision of staff to man specialist clinics and to carry out operative work has passed to the Hospitals Authority. Already they have assumed responsibility for the full cost of Tonsil and Adenoid operations, for child guidance treatment, and for orthopaedic appliances, for all of which provision had previously to be made out of local rates.

For some little time the number of pupils attending at our clinics dropped very considerably, but after a while the attendances were resumed though to a lesser degree than formerly. This actually worked out advantageously as it allowed the staff to devote more time to each individual case than had been possible previously.

On the dental side we have extended our usefulness by the installation of X-rays. This put us into a better position to assess the dental state of selected cases.

The coming into operation of the Health Services Act has adversely affected our dental scheme by making private practice seem much more attractive and thereby depriving us of the service of personnel to staff our clinics and to maintain a priority service, without which any general dental scheme is bound to fail.

In closing, tribute must be paid to a very loyal staff who have endeavoured to carry out their work efficiently and to the satisfaction of the public whom they serve. Our thanks are due to the Principals of the various schools and to their assistants for the help they have given to facilitate our work. No scheme of health service could function effectively without the encouragement and stimulus derived from the Medical Officer of Health and the Director of Education, who have been behind us through the year in the work we have endeavoured to do.

T. F. S. FULTON,

Senior Medical Officer (*Schools*).

MEDICAL INSPECTION

Inspection has been confined this year to certain age groups in the primary and intermediate schools and to two special groups in the local authority's grammar schools.

In the primary schools, inspection was arranged for the entrants, intermediate and those hitherto called "leavers," specials and the re-examination group, the last consisting of all those previously found defective.

The entrant group consisted of pupils of various ages, due entirely to the transition of compulsory school age from 6 to 5, and also the coming in of compulsory medical inspection. Hitherto this group consisted of 6's, with some 7's, who had been missed the previous year. From now on entrants should be mainly 5's with some 4's, depending on the type of schools, and the admission rate for those under compulsory school age.

The intermediates are those aged 8 and under 9. The importance of this group is that it contains very many who are undergoing a period of accelerated growth, which coincides with increased educational load.

The "leaver" group was made up of those aged 12 and with possibly some 13's. Since April last and the setting up of Intermediate Schools, this group will disappear and be replaced by one made up of those entering these schools. At a later age, a new group, the 14's, will be brought in, to dispose of those about to leave school and go into industry.

Secondary scholars in the Local Authority's schools have been examined on admission thereto at about the age of 12 and subsequently at approximately age 14.

The special group is composed of any children not dealt with in any of the foregoing groups. They were generally selected following representation by the parent or on account of weakness or deficiencies suspected by teachers or health visitors. This group, as one would expect, contained a high percentage of defectives who were referred for appropriate treatment.

The re-examination groups consisted of those children previously found to be defective and were examined to determine if their previous conditions had received treatment and how far it had been cured or ameliorated.

Because of the strictness of our previous recordings, this group has tended to outgrow all the other groups and has embarrassed us somewhat by the time taken to work through it.

During the past year we have carried out more inspections than at any time previously, in all 39,138. This is an increase of 39.27 per cent. This is explained by an increase in the actual numbers inspected in the various age groups, almost 50 per cent. increase in the number of specials seen, and, as referred to above, an increase of 48 per cent. in the re-examination groups.

Parental response to our invitations to attend at the inspections has been very good, 8,242 being present which corresponds to 42 per cent. of those examined. This shows a slight increase on the 1947 figure.

With the coming into operation of the Education Act, 1947, and the bringing in of compulsory medical inspection, the refusals have dropped from 289 in the first quarter to three in the rest of the year. Even these were sent in under a misunderstanding of the conditions which prevailed.

Absenteeism is another means of avoiding medical inspection. Many are genuinely ill and it is only in the very large schools, in which it is necessary to stay for some considerable time, that such cases can be picked up, should they return before the staff have finished the current programme of work. Doubtless compulsory medical inspection has helped to reduce the number of absentees for the last year; these were only 1,557, a reduction of over 26 per cent. from the previous year's figure.

TABLE I. (A)

Primary Schools.

Routines						Specials	Re-examinations	Totals
Ages	4–6	7	8–9	12–13	Other Ages			
Boys ..	2,434	1,328	3,064	2,751	262	491	8,943	19,273
Girls ..	2,342	1,168	3,262	2,713	298	524	9,558	19,865
Totals ..	4,776	2,496	6,326	5,464	560	1,015	18,501	39,138

INSPECTION OF SECONDARY PUPILS

The new act provided that all those pupils attending grammar schools should be examined, medically and dentally.

Time had to be given to these voluntary grammar schools to decide whether or not they would provide their own scheme of inspection. Under the circumstances it was only possible to carry through the necessary work in the two maintained by the Education Authority, the Grosvenor and Technical High Schools.

The subjoined table gives the details of the numbers inspected. In due course it should be possible to reduce those seen down to the various age groups and so help comparative figures to be obtained.

TABLE I. (B)

Secondary Schools.

ROUTINE EXAMINATIONS

Age	12	13	14	15	16	17	18	Totals
Boys	3	42	99	69	9	4	5	231
Girls	3	45	105	24	—	—	3	180
Totals	6	87	204	93	9	4	8	411

Refusals of inspection and absentees were to be found amongst this group of pupils, there being 9 of the former and 23 of the latter.

VACCINATION

We are concerned with the vaccinated state of the school population, because vaccination against smallpox is still compulsory in this country. For years past, because enforcement was probably not being carried out, the number of those who were not satisfactorily vaccinated has been very high. In 1947 there was an improvement among the youngest age groups, and it was hoped that that was a sign of a change. Examination of the 1948 figures, however, discloses that the former figures indicated only a temporary improvement and the position now is that approximately 23 per cent. of the groups examined were not vaccinated at all.

AVERAGE HEIGHTS AND WEIGHTS

In comparing the figures for 1948 with those for 1947, we find a peculiar result. The weights for both boys and girls in the Intermediate group have increased substantially, for the boys more than the girls. In the other group, the average weights are considerably less. Taking the heights for the Intermediate group, we find that both boys and girls are slightly shorter than the 1947 group, while in the other two groups, a slightly greater divergence on the wrong side is noticed.

TABLE 2.

Average Weights and Heights—Primary Schools.

BOYS				GIRLS			
Age	Number examined	Ave. height (inches)	Ave. weight (lbs.)	Age	Number examined	Aver. height (inches)	Aver. weight (lbs.)
4	7	39.6	39.1	4	15	38.5	36.9
5	397	41.6	40.6	5	465	41.1	39.2
6	2,030	43.4	43.7	6	1,862	43.0	42.2
7	1,328	45.1	47.5	7	1,168	44.6	45.2
8	1,861	49.0	56.6	8	1,924	48.4	53.8
9	1,203	49.7	59.6	9	1,338	48.9	56.1
10	167	50.8	60.0	10	211	50.0	58.1
11	80	54.0	70.9	11	77	53.2	66.8
12	2,566	55.4	75.0	12	2,530	55.2	74.9
13	185	56.7	79.3	13	183	57.1	81.2
14	15	56.6	79.4	14	10	57.8	85.2
	9.839				9,783		

CLOTHING AND FOOTGEAR

Attention has been paid to the clothing and footgear of all the pupils inspected. There is little variation in the clothing position, most children are clad satisfactorily, and the parents of any found otherwise are notified and requested to bring about an improvement.

With regard to footwear, the position is less satisfactory although there has been an improvement over a period of years. Now there are 4 per cent. fewer children wearing boots than there were in 1946. In that boots are more likely to be defective even this reduction is all to the good. By reference to the table, it will be seen that the defectives in both groups have been reduced appreciably.

The assessment of the suitability or otherwise of footgear has been based in part on measurement with a standard sizeing stick of the feet and of the footgear worn.

TABLE 3.

	Percentage Satisfactory			Percentage Unsatisfactory			Percentage Wearing		
	1946	1947	1948	1946	1947	1948	1946	1947	1948
Clothing	99.61	99.85	99.81	0.39	0.14	0.19			
Footwear—Shoes ..	92.38	96.05	96.51	7.62	3.95	3.49	75.36	76.80	79.68
,, Boots ..	88.63	93.64	95.34	11.37	6.36	4.66	24.64	23.20	20.32

DEFECTS DISCOVERED AT MEDICAL INSPECTION

In the subjoined Table is set forth a summary of the findings of the medical inspection of 19,622 elementary and of 411 secondary scholars. These groupings have been retained to enable us to contrast these figures with those for previous years.

Taking the over all picture it seems that there has been an all round reduction in the number of defects found. Detailed examination, however, reveals that there has been an increase in the numbers noted for speech defects, nervous conditions, deformities other than those due to rickets and in tuberculosis of bone and gland. Amongst the groups referred for treatment we find an increase in Adenoids only and in chronic Tonsillitis and Adenoids.

The listing of defects is unconsciously affected by the availability of measures for amelioration. With the proposed inauguration of speech therapy in school clinics one can expect the figures for treatment for such to be loaded somewhat.

The incidence of skin disease has continued to decline and has reached the lowest level recorded since 1940. Scabies has become quite a rarity in comparison with its occurrence during the war years.

In considering the return given for the inspection of secondary pupils we find, with few exceptions, a general reduction here too. There has been a very significant fall in the amount of skin disease to which a certain type of adolescent is peculiarly prone.

The only conditions showing increases are those in the observation groups for defects of vision (including squint), bronchitis and allied affections.

TABLE 4.

CLASSIFICATION	NATURE OF DEFECT	No. exd.	Defective for Treatment	Per 1,000	Defective for Observation	Per 1,000
1. Skin Disease		19,622 (411)	366 (8)	18.64 (19.37)	58 (2)	2.95 (4.87)
2. Defects of the eye	External Eye Disease,etc.	do.	233 (1)	11.86 (2.43)	91 ..	4.64 ..
	Defective Vision*	12,017 (411)	1,686 (30)	140.30 (73.00)	362 (39)	30.12 (94.90)
	Squint	19,622 (411)	664 (4)	33.84 (9.73)	334 (3)	17.02 (7.30)
3. Defects of the Ear	Discharging Ear	do.	164 (2)	8.36 (4.87)	158 (1)	8.05 (2.43)
	Other Diseases	do.	145 ..	7.39 ..	40 ..	2.04 ..
	Defective hearing (Other than above)	do.	101 ..	5.15 ..	31 ..	1.58 ..
4. Defects of the Mouth, Nose and Throat	Ch. Tonsillitis	do.	1,996 (15)	101.72 (36.50)	3,642 (17)	185.61 (41.37)
	Adenoids	do.	79 ..	4.03 ..	28 ..	1.43 ..
	Ch. T. and Adenoids	do.	281 ..	14.32 ..	263 ..	13.40 ..
	Neck Glands, enlarged	do.	804 (2)	40.97 (4.87)	930 (5)	43.40 (12.17)
	Other Nose and Throat conditions	do.	243 (2)	11.82 (4.87)	88 ..	4.48 ..
5. Defective Speech		do.	117 (2)	5.97 (4.87)	114 ..	5.81 ..
6. Defects of the Heart and Lungs	Heart conditions	do.	187 (2)	9.53 (4.87)	264 (4)	13.48 (9.74)
	Phthisis	do.	13 ..	0.66 ..	7 ..	0.35 ..
	Bronchitis,etc.	do.	1,180 (8)	60.14 (19.47)	877 (5)	44.69 (12.17)
7. Constitutional Diseases	Anæmia	do.	153 (3)	7.80 (7.30)	135 (2)	6.88 (4.87)
	Tuberculosis of Bone and Glands, etc.	do.	24 ..	1.22 ..	29 ..	1.48 ..
	Rickets and Rickety Deformity	do.	55 (2)	2.80 (4.87)	25 ..	1.27 ..
8. Defects of the Nervous System		do.	34 ..	1.74 ..	35 ..	1.79 ..
9. Deformities other than due to Rickets		do.	376 (10)	19.16 (24.34)	194 (4)	9.88 (9.73)
10. Other Diseases and Defects		do.	709 (9)	36.13 (21.90)	290 (3)	14.78 (7.30)

* Only those children in the "Intermediates" and "Leavers" groups were examined in a routine way for defective vision.

Figures in brackets are related to the Medical Inspection of Secondary School Children.

COMPARATIVE NUTRITION SURVEY

The findings of the nutritive state of the children inspected depends almost entirely on personal opinions of the various medical officers carrying out the inspections. They are likely to be influenced by varying factors. In such cases this Table can only show an imperfect picture of the comparative state of nutrition.

TABLE 5

Comparative Nutrition Table—Elementary Schools.

GROUPS		A (Excellent)		B (Normal)		C (Slightly sub-normal)		D (Bad)	
Sex		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants	Number	996	836	2,226	2,024	685	782	18	38
	% ages	25.38	22.72	56.71	55.00	17.45	21.25	0.46	1.03
Intermediates	Number	907	919	1,598	1,591	577	790	20	33
	% ages	29.24	27.57	51.51	47.74	18.60	23.70	0.65	0.99
Third age group	Number	675	814	1,654	1,440	513	468	7	11
	% ages	23.69	29.78	58.06	52.69	18.01	17.13	0.24	0.40
TOTALS		2,578	2,569	5,478	5,055	1,775	2,040	45	82
AVERAGES		26.10	26.36	55.47	51.87	17.97	20.93	0.46	0.84
GRAND TOTALS		5,147		10,533		3,815		127	
1948 Average %		26.23		53.68		19.44		0.65	
1947 Average %		23.20		54.10		22.23		0.47	

Taking the Table as a whole, we find that there has been a reduction in the number of pupils recorded as slightly subnormal (C), and that there has been almost a proportional increase in the (A) group.

In the Entrant and Intermediate groups there has been a very slight increase in the number found to be of "bad" nutrition (group D).

A comparative nutrition Table for the Secondary schools is appended. The Entrant group in these schools corresponds roughly to the third age group in the Elementary schools. It will be seen that the nutritional state of the Secondary scholar compares very favourably with that of his opposite number in the elementary schools.

TABLE 6

Nutrition Table—Secondary Schools.

GROUPS		A (Excellent)		B (Normal)		C (Slightly sub-normal)		D (Bad)	
Sex		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants	Number	13	57	150	78	28	39	..	..
	% ages	6.81	32.76	78.53	44.83	14.66	22.41	..	..
Fourth age group	Number	28	3	12	1	2	..	..	..
	% ages	66.67	75.00	28.57	25.00	4.76	..	..	..
TOTAL		41	60	162	79	30	39	..	..
% AGES		17.60	33.71	69.53	44.38	12.87	21.91	..	..

PROVISION OF MILK AND MEALS

It is opportune at this stage of the report to state that all pupils have the opportunity to take milk in school, that is on five days in the week during term time. The necessitous case receives 2/3 pint daily instead of the normal 1/3 pint. All the milk supplied is pasteurised, being sent out in 1/3 pint bottles. "Straws" are provided through which it can be withdrawn.

Certain pupils who are prevented from attending school, either elementary or special, becuase they are physically or mentally handicapped, are able to obtain supplementary milk at a reduced cost through the food office. This enables the parent to receive one pint of milk from the normal retailer at a reduced rate. The Ministry defray the extra cost as provided for in S.R. & O. No. 1673 of 1947 for C grade milk.

Actually in Belfast at present the milk supplied is B pasteurised, though it is possible that grade C could be supplied.

VISUAL DEFECTS

Below are repeated Tables similar to those produced last year, indicating (1) the sex and distribution of visual defects, and (2) the relation between the incidence and the school at which the child was in attendance when seen. By comparison with the 1947 figures this year's findings are somewhat better all round except in the boys' intermediate 6/12-6/24 group.

TABLE 7

(1)

	INTERMEDIATES				THIRD AGE GROUP				TOTALS			
	Boys	%	Girls	%	Boys	%	Girls	%	Boys	%	Girls	%
6/6–6/9 R or L	2,551	82.24	2,746	82.39	2,424	85.08	2,248	82.46	4,975	83.60	4,994	82.33
6/12–6/24 R or L	398	12.83	463	13.89	316	11.09	365	13.35	714	12.00	828	13.65
6/36–6/24 R or L	153	4.93	124	3.72	109	3.83	120	4.39	262	4.40	244	4.02
Total	3,102		3,333		2,849		2,733		5,951		6,066	

(2) Incidence of Defective Vision in Relation to Type of School.

School Rating	6/6–6/9	%	6/12–6/24	%	6/36 or over	%	Total
1	1,130 ..	77.45 (78.44)	272 ..	18.64 (14.95)	57 ..	3.91 (6.61)	1,459
2	1,798 ..	79.14 (80.84)	357 ..	15.71 (13.55)	117 ..	5.15 (5.61)	2,272
3	7,041 ..	84.97 (83.18)	913 ..	11.02 (12.62)	332 ..	4.01 (4.20)	8,286
Total	9,969 ..	82.96 (81.98)	1,542 ..	12.83 (13.16)	506 ..	4.21 (4.86)	12,017

Corresponding figures for 1947 shown in brackets.

School groupings are (1) those unsatisfactory for school purposes; (2) those considered satisfactory or capable of being altered to come within this category, and (3) those, mostly modern type, permitting proper environment during school hours. In general it can be expressed by, the poorer the building the greater the degree of defective vision and the more cases there will be. It must not be overlooked that the deficiency which develops in a bad school is carried on through promotion to a senior one and so effects the percentage of that which possibly is a better school.

RE-EXAMINATION GROUP

In the subjoined Table is set out the results of the re-examination of all those children previously found defective who were re-inspected during the year to discover the treatment each had received and the result of such treatment.

As will be seen approximately 50% of those referred for treatment never received any. Fortunately, of these 40% improved despite this lack. In actual fact, therefore, only 30% of all those referred could be said to be cases of neglect.

Of those receiving treatment, a little less than a quarter were cured of the condition for which they were referred while a little less than 3/5ths were definitely improved.

TABLE 8.

Total No. Due 22,871 — No. Boys Seen 8,882

Total No. Re-examined 17,808 — No. Girls Seen 8,926

DEFECTS OF	TREATED				UNTREATED			Observation only
	Cured	Imp.	Same	Total	Imp.	Same	Total	
Mal-Nutrition	134 (19.3)	472 (68.1)	87 (12.5)	693 ..	221 (46.6)	253 (53.4)	474 —	506 —
Skin	13 (41.9)	14 —	4 —	31 —	3 —	1 —	4 —	29 —
Eyes—Vision	95 (3.6)	1,841 (70.8)	663 (25.5)	2,599 —	753 (51.4)	710 (48.5)	1,463 —	1,814 —
,, Squint*	20 (2.1)	484 (51.1)	442 (46.7)	946 —	89 (30.4)	203 (69.5)	292 —	314 —
,, O.C.	36 (36.3)	53 (53.5)	10 (10.1)	99 —	10 (29.4)	24 (70.5)	34 —	77 —
Ear	93 (37.3)	129 (51.8)	27 (10.8)	249 —	49 (34.5)	93 (65.4)	142 —	173 —
Nose and Throat ..	808 (76.1)	195 (18.3)	58 (5.4)	1,061 —	1,283 (33.1)	2,586 (66.8)	3,869 —	3,091 —
Speech	6 (16.6)	27 (75.0)	3 (8.3)	36 —	17 (20.2)	67 (79.7)	84 —	226 —
Heart	12 (13.9)	55 (63.9)	19 (22.0)	86 —	25 (38.4)	40 (61.3)	65 —	326 —
Lungs	235 (30.4)	455 (58.9)	82 (10.6)	772 —	256 (45.4)	307 (54.5)	563 —	711 —
T.B.	1 (3.7)	23 (85.1)	3 (11.1)	27 —	3 (42.8)	4 (57.1)	7 —	99 —
Nervous	2 (7.1)	21 (75.0)	5 (17.8)	28 —	5 (38.4)	8 (61.5)	13 —	39 —
Orthopædic	26 (20.9)	84 (67.7)	14 (11.2)	124 —	27 (20.1)	107 (79.8)	134 —	214 —
M. Retarded	— —	14 (93.3)	1 (6.6)	15 —	17 (28.3)	43 (71.6)	60 —	202 —
Other Conditions ..	133 (37.5)	180 (50.8)	41 (11.5)	354 —	111 (37.2)	187 (62.7)	298 —	455 —
Totals	1,614 (23.0)	4,047 (57.0)	1,459 (20.0)	7,120 —	2,869 (38.0)	4,633 (62.0)	7,502 —	8,276 —

* Not included in "Vision."

Figures in brackets are percentages.

SPECIAL SCHOOLS

The Nursery Schools—Arellian and Edenderry

Strictly speaking these should not be classified as special schools as they are not for handicapped children but only for those whose home circumstances warrant their admission to a nursery school. They are included here because the medical supervision of the pupils differs from that given to the children attending the ordinary school.

As in previous years they have had daily visits from a nurse and a weekly visit from a medical officer. This has enabled us to give each toddler full examination once per term, and at the same time deal with any intercurrent condition which might have arisen. The defects found have been so negligible that they do not warrant putting into Table form. Chronic Tonsillitis was the most common cause for referral for treatment, while deformities, chest conditions and other nose and throat defects were chiefly the reason for requiring observation and re-examination at later dates.

The nutritional state of the children was very satisfactory. Grading them to that used for the elementary pupil we get the following percentages; excellent, 29.92 (26.23); normal, 57.66 (53.68); slightly subnormal, 12.40 (19.44); bad, nil (0.65).

(Figures in parenthesis are those comparable for the elementary scholars).

Except for a small outbreak of measles in one school, there has been practically no infectious disease amongst this group of children.

In common with the other children, they have received their daily school milk, and special attention has been paid to their diet, which has been provided through the School Meals Service. In addition, orange juice and cod liver oil have been supplied through the clinic, requisitions for these being made upon the Ministry of Food.

Graymount Open-Air School

During the year 88 boys and 80 girls spent some time in this school. The new admissions during the year were 30 boys and 25 girls. There was an average of 129 on rolls through the year and the attendance averaged 107.

Considering the type of case sent to this school, these figures can be taken as satisfactory except that it is to be regretted that we have so few school places available. We are receiving recommendations for admissions from differing sources, and are hard put to it to differentiate between them and to give proper priorities.

Examination of the details of those pupils sent back to the ordinary schools during 1948 gives the following interesting and instructive result.

Boys, 23.
Girls, 23. Total, 46.

	Boys	Girls
Average Stay in Months	24	27
Average Gain in Height in inches ..	3.7	4.5
Average Gain in Weight in lbs., ozs. ..	12:6	20:1

Results for Total (46).

Average Stay in Months, 25½
Average Gain in Height, 4 inches.
Average Gain in Weight, 16¼ lbs.

Arrangements have been made during this year for buses to pick up the pupils near their homes and take them right up to the school. This saved them from having to leave home at an early hour and travel to the City Centre to await for transportation thence to the school. On arrival in school they get a snack. During the day they have their school dinner followed by a rest period. Then prior to returning home by bus, they get another snack, generally consisting of milk, bread, butter and jam, or something similar.

Oakleigh School

This is a school for educationally subnormal children to which they are admitted after careful consideration of their progress or otherwise in the ordinary school.

The cases generally arise as the result of a report from the teacher or a recommendation from the child guidance clinic, following their investigation into behaviour and other problems.

As a rule the decision is based upon a school report, supported by a medical examination and an intelligence test.

Hitherto it has been the custom for the parent and the children selected to be interviewed by one of the Ministry's medical officers to confirm the findings. This has strengthened the hands of the Local Authority to secure admission of the suitable candidates, and at the same time has served as a check on our findings.

During the year there was an average of 160 in attendance, 198 being carried on the roll. The school, like all day special schools has received a weekly visit from a medical officer and a health visitor has paid two visits each week. Routine medical and dental inspections have been carried out and the findings incorporated into those obtained in the ordinary schools as from that point of view these pupils must be treated as similar to those in the ordinary school.

Camp School

During the year the Education Authority organised a camp school at Dundrum, Co. Down. It was housed in a holiday camp which was leased. The quarters previously had been a military camp consisting of nissen huts fitted up with double bunks in the sleeping quarters.

The pupils were selected from those schools in which were to be found those children who would benefit by such a change of environment. The party generally consisted of 60 boys or girls together with two of their teachers and at times one voluntary helper.

All the children were medically examined prior to final acceptance, any minor conditions, especially of uncleanliness, were cleared up prior to departure for the week's stay in camp.

Arrangements were made with a local practitioner to act as visiting medical officer to the camp. This enabled all emergencies to be dealt with promptly.

In general, the health of the pupils was very good and out of 654 boys and 306 girls who passed through the camp only one had to go to hospital and one other to be sent home because of the recurrence of an old ailment, about which we had been kept in ignorance.

The organiser of school meals supervised the feeding arrangements, the necessary ingredients being supplied through the school meals contract, and cooked in the camp kitchen.

SCHOOL HEALTH ACTIVITIES OTHER THAN THAT CARRIED OUT IN SCHOOLS

Clinics

There are only three clinics serving the whole city. The Central Clinic is an administrative centre at 40 Academy Street. It has to serve the South and West quarters of the County Borough. This entails a very considerable journey for the parents and children from the outlying schools in these areas.

To overcome this objection, a site for a clinic in Cupar Street to serve the West area has been mooted, and is due to be taken by vesting order.

To provide for the South, a request has been made that the premises previously used as a dispensary in Glengall Street be transferred to us to enable the medical side of our work to be brought nearer that area, until a more commodious building, large enough to house all the public health clinic service for this area, is available.

The North West area of the city is served by the clinic at Carlisle Circus. This is merely a terrace house, adapted for the purpose, to which has been added temporarily the upper storey of the neighbouring building. This is much too small for our purpose, quite out of date, and gives the public too few and unsatisfactory facilities. Its replacement by another modern building in this locality has been under consideration for some time and is long overdue.

East Belfast is served by an old school building converted into a clinic situated at Cherryville Street. It has become too small already and cannot serve this area adequately. Plans are in hand for its enlargement. This will help somewhat, but eventually there will have to be a subsidiary clinic for this area, as the present one is eccentric to the area which it should serve.

THE WORK OF THE SCHOOL HEALTH VISITOR

The duties of the health visitor are changing gradually to provide a much better service than existed formerly. This will in time make the duties much more worth while and give greater interest to those employed. Newly enacted legislation has altered the relationship between the various Authorities and the public they serve. As a sign of the times, the staff has been called upon to follow up patients who have failed to co-operate with the Hospital Authority in the utilisation of treatment, or in reporting for consultation previously arranged.

In addition to these and allied duties they have assisted at medical examination, the visitation of special schools, the carrying out of treatment in the clinics and "cleanliness" inspections. In connection with all these duties, they paid 8,100 home visits during the year, an increase of 11 per cent. over the previous year's figure.

During the cleanliness surveys 253,872 children were inspected. Of these 6.23 per cent. had nits, the eggs of vermin and 1.40 per cent. were actually verminous. The latter figure is somewhat better than the corresponding one in 1947, but the figure for nits is not so good.

With so many new preparations on the market capable of controlling and even eradicating this condition the incidence is not satisfactory. However much one reduces the school incidence, there is always a reservoir of infection amongst the mothers or younger children of the families concerned. Nothing but radical treatment of the whole family at one and the same time can eventually eradicate this condition.

MEDICAL AND SPECIAL TREATMENT

This work can be divided into several groups, *viz.*, (1) Examination Clinics; (2) Eye, Ear, Nose and Throat Clinics; (3) Dental Treatment; (4) Tonsil and Adenoid Operation; (5) Ultra Violet Light Therapy; (6) Minor Ailments; (7) Child Guidance; (8) Speech Therapy; (9) Physio-therapy; (10) Head Cleansing.

Excluding dental patients for whom separate records are kept, the number of individuals passing through the clinics during the year was 14,990 which is a slight reduction on the number handled the previous year.

This is a very considerable proportion of the school population and shows how much the clinics meet their requirements. Of the number seen 1,743 were referred to private practitioners for treatment, being 4.93% of those attending.

EXAMINATION CLINICS

This is essentially an all purpose clinic. With the exception of those requiring dental treatment and those specially allocated at medical inspection to eye, ear, nose and throat treatment all pupils requiring any form of treatment in the clinics have to pass through this one. It acts by screening all cases, giving advice and supervision to some, passing others on to appropriate form of treatment and generally keeping a watchful eye on all those who have passed through.

From time to time it is necessary to call back for re-examination, those who have been advised, to ensure that adequate treatment is being given and that there is no remission.

The following Table gives some idea of the diversity of the conditions handled though it does not represent the time involved in the inspection of the different groups. More often than not those cases which give little promise of improvement or return for the time expended demand a disproportionate expenditure of time and energy. A considerable number of the cases seen are given individual appointments to allow investigation being made as full as possible.

TABLE 9

Clinic Examinations.

CONDITION	Percentages	CONDITION	Percentages
For Anaesthetics	35.45	Heart and Circulation	1.32
,, Colds	2.72	Infectious Diseases	1.95
,, Debility	2.34	Lung Conditions	5.68
,, Ears	2.60	Nose and Throat	7.50
,, Eyes—vision only	3.64	Skins	17.90
,, —other conditions ..	2.30	Other classified small groups ..	8.85
,, Gastro-intestinal	2.41	Miscellaneous—unclassified ..	2.97

The attendances at the clinics have been well maintained, 33,525 being the year's total. Of those seen, 253 were referred to the Tuberculosis Officer for examination and, when considered necessary, further treatment.

There are a few special cases which should be handled through the clinic but owing to peculiar circumstances cannot be brought to the doctor. In these cases we arranged for them to be seen in the privacy of the home as this saves the parents unnecessary publicity. They cannot be allowed to go by default as most of them have to be reported to other authorities who are interested to know of their existence. There were only 12 such cases last year, and these were eventually disposed of by notification under Section 30 of the Education Act, 1947.

EYE, EAR, NOSE AND THROAT CLINICS

From time to time in the past we have had to institute waiting lists for refractions. This generally resulted from the re-examination groups and pupils who had had spectacles ordered previously. Once the cost of spectacles was transferred to the Local Authority by the Education Act of 1947, the need to persuade parents to obtain spectacles lessened very much. With the coming into operation of the Health Service Act, the general demand for glasses was no whit less amongst the school population and we have had a constant waiting list ever since. Naturally this has meant a greater number have been tested, and has raised this year's total to 3,555 which includes 847 post-mydriatic tests.

For the past 4 months of the year, all spectacles ordered went through the Supplementary Eye Service channels. Thus we are unaware of the type of frame ordered and cannot check whether the glasses supplied are up to prescription. In time we may be able to review the position but until this has been done we will not be sure how this service had worked.

Ear, nose and throat cases have been referred to the visiting specialist who has held a clinic once weekly. Through this a certain number of cases suitable for operation are selected and dealt with in the Musgrave Park Hospital. Other cases have been referred to selected hospitals for treatment which could not be given in the clinic. By comparison with 1947 there was a slight reduction in the number seen, the total being 2,025 and of these 120 required no treatment.

ORTHOPAEDIC TREATMENT

There is no special orthopaedic section in the clinic. All cases discovered if of major degree are referred to the Hospitals Authority. In the past, most cases were sent to the special clinic held in the Belfast City Hospital. This institution was then rate-aided and therefore could be used without the Education Authority being required to pay for their attention. Minor defects were referred to the physiotherapist for remedial exercises.

Any definite or doubtful tubercular cases were referred to the Northern Ireland Tuberculosis Authority for diagnosis and/or treatment.

RHEUMATIC AND CARDIAC cases have received particular attention.

There was a close liaison between the medical officers in our various clinics and the Rheumatic Clinic set up in the Royal Belfast Hospital for Sick Children. Cases were referred as they were discovered and reports were sent us from time to time of all school children who were treated. By this we were kept informed regarding most of the serious cases in the city.

DENTAL TREATMENT

Complete details in the numbers inspected and treated, of the schools from which they came and the type of treatment given will be found in the report of the Senior Dental Officer which follows.

There is ample evidence forthcoming that the potentialities of this service are limited merely by the lack of accommodation and the necessary professional staff to provide the treatment required.

Until the latter problem is solved it would appear that progress must be held up.

BELFAST COUNTY BOROUGH HEALTH COMMITTEE
ANNUAL DENTAL REPORT, 1948

Dr. T. F. S. FULTON, M.B., B.Ch., D.P.H.,
Senior Medical Officer (Schools).

Dear Sir,

I beg to submit to you my Annual Report and Statistical Tables covering the work of the Dental Section for 1948, together with comparative figures in respect of the past three years. Main Statistics in summarised form, as required by the Ministry of Health and Local Government, are further appended.

DENTAL INSPECTION IN SCHOOLS

All Elementary, High, Special and Nursery Schools for which we are responsible were visited by the inspecting officers during the year, making a total of **160** schools visited. The total number of children notified for inspection was **60,545.** Of this total only **7** refused. Those absent on the days of inspection numbered **8,074** or **13.3**%. This percentage, however, approximates to the normal absentee percentage, and therefore cannot be said to have any dental inspection significance. The resultant number of children examined was **52,464,** an increase of **6.8**% on the previous year. The number of sessions required for inspections totalled **384,** an average of **136** children being inspected per session. The year's inspection survey included the examination of **1,166,803** teeth.

DENTAL CONDITION OF CHILDREN INSPECTED

The number of children found to have dental defects totalled **40,725** or **77.6**% of those inspected. Analysis of the defects shows that **14,993** children required extractions, **36,318** required fillings, while **11,157** required both extraction and filling treatments. A total of **1,597** were in need of orthodontic treatment.

Although the percentage defective for the current year is less than the preceding year by **2.6**% and is **5.5**% less than in 1946, I am not prepared to say at this stage that the persistently high defect-percentage of the past is now being progressively reduced. It is nevertheless gratifying to record a substantial drop over the past two years, and one could reasonably hope that it is in some measure due to the considerable number of conservation treatments we are now providing for the children, and which have been made possible by the provision of additional operating staff. There is little room for complacency however. The condition-figures I have given indicate treatments required far beyond the current yearly capacity of the Section.

A Statistics Table showing condition of defectives in relation to age groups is provided as a matter of interest. It should be disregarded in respect of the extreme groups since an insufficient number of children were inspected to furnish a true percentage average.

DENTAL INSPECTION: STATISTICAL TABLES

SCHOOL DENTAL INSPECTION	Area 1	Area 2	Area 3	Totals
Number of Schools visited	63	55	42	160
,, ,, ,, ,, (per cent.)	(100)	(100)	(100)	(100)
Number of Visits	145	143	112	400
,, ,, Inspection Sessions	137	137	110	384
Number inspected per Session (average)	137	136	136	136
Children notified for Inspection	21,653	21,732	17,160	60,545
,, ,, ,, ,, (per cent. of Rolls)	(98.1)	(96.7)	(97.1)	(97.3)
Children Refusing Inspection	3	—	4	7
,, Absent from Inspection	2,764	3,171	2,139	8,074
,, ,, ,, ,, (per cent.)	(12.8)	(14.6)	(12.5)	(13.3)
Boys Inspected (City)	9,885	9,578	7,694	27,147
,, Defective ,,	7,411	7,410	5,863	20,684
,, ,, ,, (per cent.)	(75.0)	(77.4)	(76.2)	(76.2)
Girls Inspected (City)	8,919	9,010	7,180	25,109
,, Defective ,,	7,198	7,229	5,453	19,880
,, ,, ,, (per cent.)	(80.7)	(80.2)	(75.9)	(79.2)
Children Inspected (Outside City)	40	15	143	198
,, Defective ,,	31	15	115	161
TOTAL CHILDREN INSPECTED	**18,844**	**18,603**	**15,017**	**52,464**
,, ,, (per cent. of Rolls)	(85.4)	(82.8)	(85.0)	(84.3)
TOTAL CHILDREN DEFECTIVE	**14,640**	**14,654**	**11,431**	**40,725**
,, ,, ,, (per cent.)	(75.8)	(78.8)	(76.1)	(77.6)

CLASSIFICATION OF DENTAL DEFECTS	Area 1	Area 2	Area 3	Totals
Unsaveable Teeth	5,354	5,891	3,748	14,993
Saveable Teeth	13,283	13,351	9,684	36,318
Saveable and Unsaveable Teeth	4,035	4,697	2,425	11,157
Irregularity of Dentition	591	680	326	1,597
Other Dental and Oral Defects	973	1,098	460	2,531
Total Teeth Unsaveable	10,624	13,553	7,802	31,979
,, ,, Saveable	44,551	40,571	34,933	120,055
TOTAL TEETH EXAMINED	421,667	411,306	333,830	1,166,803

CLASSIFICATION OF DEFECTIVES:

Age Groups	BOYS			GIRLS		
	Inspected	Defective	Per cent. Defective	Inspected	Defective	Per cent. Defective
3	20	14	70.0	9	6	66.7
4	121	69	57.0	118	79	67.0
5	1,320	881	66.7	1,210	853	70.5
6	2,981	2,100	70.4	2,801	2,122	75.8
7	3,132	2,334	74.5	2,858	2,253	78.8
8	3,067	2,369	77.2	2,797	2,302	82.3
9	3,090	2,481	80.3	3,044	2,573	84.5
10	3,196	2,587	80.9	2,982	2,444	82.0
11	3,048	2,378	78.0	2,869	2,252	78.5
12	2,858	2,124	74.3	2,671	2,081	77.9
13	2,582	1,970	76.3	2,372	1,845	77.8
14	1,529	1,199	78.4	1,289	1,005	78.0
15	230	184	80.0	131	103	78.6
16	72	58	80.6	26	22	84.6
17	22	20	90.9	12	11	91.7
18	1	1	100.0	6	5	83.3
Totals	27,269	20,769	76.16	25,195	19,956	79.2

STATISTICAL TABLE

Post-Inspection Notification and Parents' Response

NOTIFICATION TO DEFECTIVES	Area 1	Area 2	Area 3	Totals
Notified as Defective	**8,616**	**10,896**	**8,848**	**28,360**
,, ,, (per cent.)	(58.8)	(74.3)	(77.4)	(69.6)
PARENTS' RESPONSE	**Area 1**	**Area 2**	**Area 3**	**Totals**
Refusing Treatment	**1,275**	**1,521**	**1,160**	**3,956**
,, ,, (per cent.)	(14.8)	(14.0)	(13.1)	(13.9)
No Response	**643**	**914**	**529**	**2,086**
,, ,, (per cent.)	(7.5)	(8.4)	(6.0)	(7.4)
Consenting to Treatment. (Total)	**6,698**	**8,461**	**7,159**	**22,318**
,, ,, ,, (per cent.) ..	(77.7)	(77.7)	(80.9)	(78.7)
,, ,, ,, (By Own Dentist)	**1,574**	**1,955**	**1,176**	**4,705**
,, ,, ,, ,, (per cent.)	(23.5)	(23.0)	(16.4)	(21.1)
,, ,, ,, (At Clinics) ..	**5,124**	**6,506**	**5,983**	**17,613**
,, ,, ,, ,, ,, (per cent.)	(76.5)	(77.0)	(83.6)	(78.9)
TREATMENT ARRANGED	**Area 1**	**Area 2**	**Area 3**	**Totals**
Appointments—				
Issued (Total)	**5,124**	**6,506**	**5,983**	**17,613**
Per cent. Defectives Notified ..	(59.5)	(59.7)	(67.6)	(62.1)
Per cent. Defectives Inspected ..	(35.0)	(44.4)	(52.3)	(43.2)
Per cent. Defectives on Roll ..	(30.6)	(36.7)	(44.5)	(36.5)

ACTION TAKEN SUBSEQUENT TO SCHOOL DENTAL INSPECTION

Until an adequate treatment staff is available, it is not possible to notify parents of all the defective children. Notifications are therefore mainly restricted, by priority, to children in the extraction category, and to those requiring conservation of the permanent dentition. It is somewhat paradoxical that, in doing so, we ignore those requiring conservation of the temporary dentition, thereby failing to substantiate the maxim, with all its implications, that "Baby's first teeth do matter," but at the moment there is no option. Even so, on this basis of priority notification, tempered as it is by a percentage reduction in the total ultimate agreements to treatment, the greatest difficulty is experienced in meeting the demand for attention, and long waiting lists for treatment at our clinics prevail.

For the reasons stated it was consequently only possible to issue notices in respect of **69.6**% of the total defectives. Of the percentage thus notified, **13.9**% refused treatment and **7.4**% failed to reply. The balance, **78.7**%, agreed to accept treatment, **21.1**% by own dentist, and the remainder, **78.9**%, asked for treatment at our clinics.

It is interesting to note that approximately four out of every five children agreeing to have treatment prefer that this should be obtained at the Committee's clinics. In respect of these children, totalling **17,613,** appointments were duly issued.

ATTENDANCES AT CLINICS

During the year there was the usual representative attendance of children from all schools entitled to treatment. A total of **16,798** individual children availed themselves of the service, and between them made **52,177** attendances. This represents, in total patients, a **10.1**% increase over the previous year. Of those attending, no less than **84.8**% were patients returning for treatment, a percentage which expresses both dental consciousness on the part of the parents and appreciation of the treatment provided.

Statistical Table: Attendances at Dental Clinics

School	Total on Rolls	Children attending Clinic	Total Clinic attendances	Total treatments
ELEMENTARY SCHOOLS: AREA 1				
All Saints' Junior	191	62	287	349
Argyle	526	105	237	297
Ashmore Street Junior	304	46	118	173
Blythe Street Junior	267	38	103	140
Botanic	463	120	353	390
Broadway Junior	305	79	236	265
Brown Street	466	90	211	345
Donegall Road Junior	504	203	692	879
Earl Street Boys'	126	16	33	48
Earl Street Girls'	124	12	35	48
Earl Street Infants'	166	20	47	85
Fane Street Senior	894	180	525	417
Grosvenor Senior (Closed June)	45	14	33	25
Linfield Junior	364	71	215	333
Linfield Senior	699	89	282	283
Mabel Street Junior	342	93	289	432
Magdalene Junior	168	43	145	203
Malone	437	115	450	508
Mariners'	290	39	92	119
Mayo Street Junior	452	108	339	476
McQuiston	332	82	257	332
Northumberland Street	349	79	226	336
Ormeau Road Junior	221	77	275	397
Percy Street Junior	238	68	236	276
Porters' Senior	315	57	202	202
Queen Victoria	457	124	373	438
St. Anthony's Boys'	227	36	79	113
St. Anthony's Girls'	214	29	67	88
St. Brendan's	219	34	74	142
St. Bride's	171	39	107	140
St. Catherine's	458	114	329	446
St. Columcille's	73	10	17	22
St. Comgall's Boys'	513	83	169	251
St. Comgall's Girls'	497	83	211	315
St. Finian's	522	89	263	330
St. Gall's	498	113	308	397
St. John's Boys'	318	54	147	203
St. John's Girls'	363	86	220	279
St. Joseph's Boys'	317	97	187	310
St. Joseph's Girls'	300	71	118	193
St. Kevin's Boys'	613	222	544	767
St. Kevin's Girls'	630	225	558	723
St. Mary's Christian Brothers'	418	112	318	397
St. Mary's Boys'	109	34	85	122
St. Mary's Girls'	145	29	56	93
St. Mary's	323	104	285	347
St. Patrick's	184	56	119	191
St. Paul's Boys'	483	106	250	303
St. Paul's Girls'	147	8	14	26
St. Peter's Boys'	265	54	105	171
St. Peter's Girls'	322	92	207	268
St. Saviour's Infants'	309	79	179	262
St. Saviour's Senior	333	58	122	215
St. Simon's	482	120	384	416
St. Vincent's	759	205	619	777
Sandy Row Junior	109	13	52	56
Springfield	449	126	419	477
Stranmillis	204	57	223	233
Ulsterville	572	231	943	1,137
Workman	207	48	129	188
St. Teresa's (Outside Boundary)	602	46	166	189
Roselands (,,)	78	7	13	9
Other Schools (,,)	—	1	1	—

Attendances at Dental Clinics (*continued*)

School	Total on Rolls	Children attending Clinic	Total Clinic attendances	Total treatments
ELEMENTARY SCHOOLS: AREA 2				
Alexandra	330	71	157	233
Antrim Road	241	128	424	494
Blenheim Junior	209	40	95	141
Carr's Glen	1,036	490	1,794	2,199
Convent	711	260	725	981
Crumlin Road	364	104	264	416
Currie Junior	301	85	240	357
Duncairn Junior	209	75	217	318
Edenderry	577	174	399	529
Everton	948	252	777	982
Finiston	675	192	565	762
Forth River	543	213	714	943
Getty Junior	313	79	199	331
Glenwood	581	71	172	221
Grove	791	241	710	979
Hemsworth Square	621	94	237	307
Hillman	492	145	436	599
Holy Cross Boys'	861	168	452	695
Holy Cross Girls'	757	162	497	708
Holy Family Boys'	303	73	213	268
Holy Family Girls'	230	57	224	261
Jaffe	275	58	210	283
John White Junior	557	120	336	541
Lancaster Street	268	73	157	269
Lynn Junior	345	91	325	465
Model Boys'	502	144	515	491
Model Girls'	504	217	740	813
Mountcollyer Senior	790	86	334	316
Old Lodge Road	169	52	108	179
Perth Street Junior	270	93	270	419
Riddel Memorial Junior	319	70	157	252
St. Colmban's Boys'	435	63	211	251
St. Colmban's Girls'	394	133	350	478
St. Enoch's	477	192	527	659
St. Malachy's Boys'	124	44	103	140
St. Malachy's Girls'	222	58	150	167
St. Mark's	309	79	200	274
St. Mary's Junior	552	120	370	497
St. Mary's Star of Sea Boys'	278	29	61	97
St. Mary's Star of Sea Girls'	258	32	76	117
St. Patrick's Christian Brothers'	471	142	356	496
St. Patrick's Boys'	408	69	152	188
St. Patrick's Girls	227	42	81	89
St. Paul's	265	30	108	147
St. Vincent de Paul's Boys'	134	17	51	53
St. Vincent de Paul's Girls'	123	12	27	31
Seaview	689	236	813	968
Skegoniel	465	112	430	399
Star of Sea Boys'	225	32	100	126
Star of Sea Girls'	232	34	98	104
Whitehouse Junior	274	63	232	327
Whitehouse Senior (Closed)	—	3	20	13
Wolfhill	172	19	47	65
Woodvale	407	123	358	490
Schools (Outside Boundary)	—	5	24	30
No School	—	2	5	3

Attendances at Dental Clinics (*continued*)

School	Total on Rolls	Children attending Clinic	Total Clinic attendances	Total treatments
ELEMENTARY SCHOOLS: AREA 3				
Avoniel Junior	702	245	734	950
Beechfield	655	188	515	741
Belmont Junior	333	108	420	510
Belvoir Hall Junior	346	63	189	261
Bloomfield	271	102	292	427
Christian Brothers'	235	63	191	251
Elmgrove	1,004	371	1,249	1,568
Euston Street Junior	305	168	659	829
Euston Street Senior	754	219	704	861
Harding Memorial	862	388	1,608	1,740
Lagan Village	121	17	48	70
Lomond Avenue	140	43	150	198
Megain Memorial	484	187	457	700
Memel Street Junior	117	51	106	151
Mersey Street	926	230	525	825
Mountpottinger	450	179	688	701
Nazareth House	97	—	—	—
Nazareth Lodge	149	—	—	—
Nettlefield	850	356	1,361	1,743
Orangefield	518	170	791	802
Ormeau Park	429	138	520	578
Park Parade	598	137	435	468
Ravenhill Road Junior	282	112	376	428
Rosario Boys'	137	59	208	219
Rosario Girls'	165	60	199	271
Rosetta	622	211	955	887
Roslyn Street Junior	133	56	152	170
St. Anthony's Boys'	169	53	171	200
St. Anthony's Girls'	185	47	159	184
St. Colman's	309	90	213	283
St. Comgall's Boys'	91	19	36	68
St. Comgall's Girls'	133	35	65	109
St. Joseph's Boys'	119	32	111	121
St. Joseph's Girls'	82	25	89	86
St. Jude's	299	138	417	459
St. Malachy's Convent	457	74	168	197
St. Matthew's Boys'	439	37	112	109
St. Matthew's Girls'	481	58	158	146
Strand	828	251	928	1,035
Strandtown	1,171	514	2,030	2,116
Templemore Avenue	940	212	651	752
Gilnahirk (Outside Boundary)	90	6	42	44
Other Schools	—	4	11	9
SPECIAL SCHOOLS:				
Haypark (Area 3)	190	79	275	318
Victoria Homes (Area 3) (* Included in Strandtown)	*	32	122	66
NURSERY SCHOOLS:				
Arellian (Area 1)	60	1	5	7
Edenderry (Area 2)	60	7	16	28
OPEN AIR SCHOOLS:				
Graymount (Area 2)	136	21	58	55
SECONDARY SCHOOLS:				
Grosvenor High (Area 1)	653	86	322	376
Technical High (Area 1)	520	101	319	354
SECONDARY GRAMMAR SCHOOLS:				
(Area 1)	—	10	73	73
INDUSTRIAL SCHOOLS:				
Balmoral (Area 2)	104	73	90	138
BLIND, DEAF AND DUMB SCHOOLS:				
(Area 1)	48	1	1	—
(Area 2)		2	3	—
(Area 3)		—	—	—
TOTALS (All Areas and Schools)	62,960	16,799	52,177	65,035

TREATMENT AT CLINICS

Dental treatment sessions to a total of **3,793** were provided at our clinics during the year. Of these, **615** were required for extractions, the balance of **3,178** being devoted to conservative measures. Slightly over **90%** of the officers' time is therefore devoted to duty in clinics as compared to **10%** required for Dental inspection in Schools.

Each child having treatment averaged **7.2** treatments throughout the year, and those who made regular routine visits were given an average of **3** check-up inspections. The child who attends periodically, as advised, consequently derives considerable dental benefit.

Totals in the various categories of treatment can be seen in the Table provided. There is naturally a yearly fluctuation in these totals according to the needs of the patient. Thus, a substantial increase in the number of extractions required, resulted in a slight fall in the total number of filling treatments accomplished, namely **2.3%**. Nevertheless the staff maintained the expected average of **7.5** fillings per session, and recorded a resultant total of **23,750** filling treatments for

Statistical Tables: Attendances—Payments—Treatments

ITEMS	Area 1	Area 2	Area 3	Totals
ATTENDANCES AT CLINICS:				
INDIVIDUALS (Clinical Inspections)	2,750	2,131	2,894	7,775
,, (Treatments)	3,670	2,624	2,715	9,009
,, ,, (Per cent. defectives on Rolls)	(21.9)	(14.8)	(20.2)	(18.7)
TOTAL INDIVIDUALS	5,199	6,004	5,595	16,798
,, ,, (per cent. of Rolls) ..	(23.6)	(26.7)	(31.7)	(27.0)
NEW PATIENTS	3,049	2,564	2,302	7,915
,, ,, (per cent.)	(16.7)	(17.5)	(11.9)	(15.2)
PREVIOUS PATIENTS	15,174	12,126	16,962	44,262
,, ,, (per cent.)	(83.3)	(82.5)	(88.1)	(84.8)
TOTAL PATIENTS	18,223	14,690	19,264	52,177
PAYMENTS:				
Free Treatments	24	6	4	34
,, ,, (per cent.)	(1.2)	(0.6)	(0.2)	(0.7)
Charges	£101 7s.	£47 17s.	£87 19s.	£237 3s.
TREATMENTS:				
EXTRACTIONS—				
(Temporary Dentition)	8,010	7,030	7,067	22,107
(Permanent Dentition)	987	906	667	2,560
TOTAL	8,997	7,936	7,734	24,667
(Per cent. of Total Treatments)	(38.5)	(41.6)	(34.2)	(37.9)
ANAESTHETICS—				
(Local)	88	107	109	304
(General)	4,142	3,539	3,619	11,300
TOTAL	4,230	3,646	3,728	11,604
(Per cent. of Total Treatments)	(18.1)	(19.1)	(16.5)	(17.8)
FILLINGS—				
(Temporary Dentition)	954	714	1,310	2,978
(Permanent Dentition)	7,510	5,292	7,970	20,772
TOTAL	8,464	6,006	9,280	23,750
(Per cent. of Total Treatments)	(36.3)	(31.5)	(41.0)	(36.5)
RESIDUAL TREATMENTS— ..				
Dressings (Tooth)	173	139	193	505
Polishings	161	150	248	559
Scalings	58	42	61	161
Other Operations	1,100	1,138	1,347	3,585
X-Ray Diagnosis	163	20	21	204
Orthodontic	—	—	—	—
TOTAL	1,655	1,489	1,870	5,014
(per cent. of Total Treatments)	(7.1)	(7.8)	(8.3)	(7.7)
CLINICAL INSPECTIONS	7,833	6,287	9,070	23,190
TOTAL TREATMENTS	23,346	19,077	22,612	65,035

Statistical Tables: Sessions—Averages—Staff

ITEM		All Areas
TREATMENT SESSIONS (Half-day)—		
Extraction and Anaesthetic		615
Filling and Other Treatments		3,178
TREATMENT AVERAGES (Staff)—		
Teeth Extracted	(Per Session)	40.1
Teeth Extracted	(Per Anaesthetic)	2.1
Anaesthetic Cases	(Per Session)	18.9
Fillings	(Per Session)	7.5
Residual Treatments	(Per Filling Session)	0.4
Clinical Inspections	(Per Treatment Session)	6.1
TOTAL PATIENTS TREATED	(Per Surgeon)	5217.7
TOTAL INDIVIDUALS TREATED	(Per Surgeon)	901.0
TREATMENT AVERAGES (Children)—		
Extraction Treatments	(Per Child Treated)	2.7
Anaesthetic Treatments	(,, ,, ,,)	1.3
Filling Treatments	(,, ,, ,,)	2.6
Residual Treatments	(,, ,, ,,)	0.6
TOTAL TREATMENTS	(,, ,, ,,)	7.2
CLINICAL INSPECTIONS (Average per Child inspected)—		3.0
STAFF COMPLEMENT (Full-time)—		
Senior Officer		1
Assistant Officers		10
Dental Clinic Nurses		3
Dental Attendants (Administration)		1
Dental Attendants (Reception)		3
Dental Attendants (Surgical)		10
TOTAL STAFF		28

the year. Total treatments in all categories numbered **65,035,** an **11.3**% increase over the previous year. This total, made possible by the appointment of additional staff, is the highest figure yet reached in the history of the service. It, however, falls far short of the total yearly treatments required to give an adequate service to the children.

The installation of dental X-ray equipment during the year, has proved a definite acquisition in respect of dental diagnosis, and has thereby effectually extended the efficiency of the treatments provided.

Statistical Tables: Comparative Main Totals

ITEM	1946	1947	1948	1948 compared 1947
SCHOOL DENTAL INSPECTION:				(Per cent.)
Schools visited	158	160	160	—
Number of Visits	370	388	400	(+) 3.1
Number of Inspection Sessions	340	358	384	(+) 7.3
Children Notified for Inspection	52,480	57,965	60,545	(+) 4.4
,, Absent from Inspection	(13.3%)	(15.2%)	(13.3%)	(—) 1.9
,, Refusing Inspection	19	11	7	(—) —
,, Inspected	**45,473**	**49,108**	**52,464**	(+) 6.8
,, Defective	**37,792**	**39,364**	**40,725**	(+) 3.5
,, Defective (Per cent.)	(83.1)	(80.2)	(77.6)	(—) 2.6
POST INSPECTION NOTIFICATION:				
Notified as Defective	24,248	27,933	28,360	(+) 1.5
,, ,, ,, (Per cent.)	(64.1)	(71.8)	(69.6)	(—) 2.2
PARENTS' RESPONSE TO NOTIFICATION:				
Refusing Treatment (per cent.)	(17.5)	(16.3)	(13.9)	(—) 2.4
No Response (per cent.)	(8.0)	(10.5)	(7.4)	(—) 3.1
Consenting to Treatment—				
TOTAL (per cent.)	(74.3)	(73.2)	(78.7)	(+) 5.5
By own Dentist	(23.6)	(21.4)	(21.1)	(—) 0.3
At Clinics	(76.3)	(78.6)	(78.9)	(+) 0.3
TREATMENT ARRANGED:				
Appointments Issued—				
(Post Inspection)	**13,763**	**16,060**	**17,613**	(+) 9.7
Per cent. Clinic Applications	(100.0)	(100.0)	(100.0)	—
Per cent. Defectives Notified	(56.7)	(57.5)	(62.1)	(+) 4.6
Per cent. Defectives Inspected	(30.2)	(40.8)	(43.2)	(+) 2.4
ATTENDANCES AT CLINICS:				
New Patients (per cent.)	(15.4)	(14.5)	(15.2)	(+) 0.7
Previous Patients (per cent.)	(84.5)	(85.5)	(84.8)	(—) 0.7
TOTAL PATIENTS	**45,291**	**47,400**	**52,177**	(+) 10.1
Individuals	**14,600**	**15,458**	**16,798**	(+) 8.7
,, (per cent. of Roll Defectives)	(29.2)	(31.8)	(34.8)	(+) 3.0
PAYMENTS:				
Free Treatments	202	172	34	(—) 80.2
Charges	£832 0s.	£825 12s.	£237 3s.	(—) 71.3
TREATMENTS:				
Extractions—				
Temporary Dentition	17,192	17,340	22,107	(+) 27.5
Permanent Dentition	2,346	2,568	2,560	(—) 0.3
TOTAL	**19,538**	**19,908**	**24,667**	(+) 23.9
Anaesthetics—				
Local	448	413	304	(—) 26.4
General	8,321	9,287	11,300	(+) 21.7
TOTAL	**8,769**	**9,700**	**11,604**	(+) 19.6
Fillings—				
Temporary Dentition	2,476	3,045	2,978	(—) 2.2
Permanent Dentition	21,001	21,253	20,772	(—) 2.3
TOTAL	**23,477**	**24,298**	**23,750**	(—) 2.3
Dressings (Tooth)	788	581	505	(—) 13.1
Polishings	1,311	700	559	(—) 20.1
Scalings	383	191	161	(—) 15.7
Other Operations	3,595	3,037	3,583	(+) 18.0
Clinical Inspections	17,836	20,420	23,190	(+) 13.6
TOTAL TREATMENTS	**57,861**	**58,415**	**65,035**	(+) 11.3
,, Individuals Treated	**9,043**	**8,748**	**9,009**	(+) 3.0
,, ,, (per cent. Roll Defectives)	(18.0)	(18.0)	(18.7)	(+) 0.7

Summarised Dental Report*

Section (I)		
1.	Number of children on school rolls ..	62,960
2.	Number of children inspected by dental officers	52,464
	Number of children specially inspected (in clinics)	23,190
	TOTAL inspected	75,654
3.	Number found to require treatment ..	40,725
4.	Number actually treated (individuals) ..	9,009
5.	Attendance made by children for treatment	28,987†
6.	Half-days devoted to inspection ..	384
	Half-days devoted to treatment ..	3,793
	TOTAL	4,177
7.	Fillings (permanent teeth)	20,772
	Fillings (temporary teeth)	2,978
	TOTAL	23,750
8.	Extractions (permanent teeth) ..	2,560
	Extractions (temporary teeth) ..	22,107
	TOTAL	24,667
9.	Administration of general anaesthetics ..	11,300
10.	Polishings	559
11.	Scalings	161
12.	Other operations	4,294††
Section (II)		
	(As Text and Main Report Statistics).	
Section (III)		
	(Nil).	

* As prescribed by Ministry of Health and Local Government.
† Total Clinic Attendances—52,177.
†† Total Treatments—65,035.

GENERAL REMARKS

From the statistics available it is possible to obtain a fairly accurate picture of the service, both as regards its present capacity and future requirements. For instance, during the past year, to provide each child with one yearly school dental inspection, clinical check-up inspections and the necessary treatments for dental fitness, one dental officer per each **5,218** patients or per each **900** actual individuals requiring treatment, was found necessary. Approximately **80**% of the children inspected each year require treatment. Allowing for the fact that **13**% of the children were absent from inspection, that only **70**% were notified subsequently as defective, that approximately **14**% refused to have treatment, and that **21**% preferred to seek treatment by private practitioners, it would still have been necessary to provide a staff of **20** dental officers, to give adequate treatment throughout the year to the total number of children who desired it at our clinics.

In awareness that the Section is only capable of meeting about **50**% of current demand, I submitted for approval and inclusion in estimates, certain proposals for extension of the dental service, *viz*,. that the staff of Assistant Officers should be increased from ten to seventeen; that there should be provision for the appointment of an X-ray dental officer, an orthodontic dental officer and a dental technician; that provision should be made in respect of dental anaesthetics and that the necessary subsidiary attendance staff should be appointed.

As our clinic accommodation is totally inadequate, proposals were also put forward for the erection of a building of a semi-permanent prefabricated nature, which could be rapidly brought into being, and which would accommodate the proposed clinical expansion of the service, pending any future long-term policy in respect of permanently built clinics. I am glad to record that approval was duly given to all these proposals.

It would seem appropriate that some reference should be made to the coming into operation of the Health Services Act in July of the current report year. It could have been reasonably surmised that as free dental treatment was then available for children from private practitioners, a considerable drop in demand at

our clinics would result. On the contrary, and largely due to the inability of private practitioners to meet the enormously increased public demand on their services, our clinics experienced a sudden and still further embarrassing demand for treatment. Waiting lists, already overburdened, expanded to alarming proportions, so that the need for extra staff and clinic accommodation became more pressing than ever. In these circumstances, the granted approvals for expansion of the dental service were doubly welcome.

In spite of this however, pessimism unfortunately prevails. That we are now faced with a possible desertion of our surgical staff to the more lucrative conditions obtaining in private practice, seems inevitable. Until the remuneration of Public Dental Officers is placed upon a more comparable basis there seems to be little hope of securing the additional staff we so urgently require. In fact, resignations from our staff may mean a drastic curtailment in the service we already provide. It is tragic that the local School Dental Service, creditably provided and formidably built up over the past twenty-five years, should disintegrate for this reason, particularly when the service for children, and especially young children, stands as a fundamental factor, and thereby constitutes a priority, as regards the dental health of the community.

In conclusion, I beg to express thanks to all those who, by their energy and co-operation, have helped to keep the Section faithfully functioning throughout the year.

I remain, Sir,

Yours faithfully,

(Signed) A. S. IRVING, L.D.S., R.C.S., Edin.,
Senior Dental Officer.

TONSIL AND ADENOID OPERATIONS

In a previous report it was stated that we had had to discontinue our Tonsil and Adenoid operations because the premises used were being reconditioned. After some months this work was completed and operation work was resumed. Prior to the 5th July we had been responsible for the cost of the surgeon and for the reimbursement of the Musgrave Park Hospital for the maintenance and other costs of this service.

After that date, the Hospitals Authority took over our responsibility. All we were called upon to do was to arrange for the admission of a certain number of pupils every week. In due course they were discharged to us by ambulance to a suitable clinic and, in time, were re-inspected by the surgeon concerned to see that everything was all right and, if necessary, to give such other treatment as the patient required.

In this way during the year, 200 children have had operative treatment and resumed school activities. The private practitioner was notified of the admission of the patient to hospital.

ULTRA-VIOLET LIGHT THERAPY

The clinics for this form of treatment have been utilised as much as previously, there being a slight increase in the attendances which reached 5,681.

The new types of lamp installed have meant a considerable saving in staff time without any reduction in the number of children treated.

MINOR AILMENT TREATMENT

During the year there has been a marked reduction in the number of scholars suffering from minor ailments presenting themselves for treatment. The attendances only totalled 5,606, a reduction of 25 per cent. A year previously we had an epidemic of ringworm and this reduction has been in part due to the cessation of this infection.

CHILD GUIDANCE

During the year 166 cases were reported to the Child Guidance Clinic which is held in the Royal Belfast Hospital for Sick Children. Of these, 104 were considered definitely in need of guidance and 62 of Speech Therapy. Most of the latter were referred before our Speech Therapist took up duty, and any referred since were in age groups outside our present scheme, or required some individual attention which we could not give in our groupings.

The extension of free treatment to this group of cases, first under the terms of the Education Act, 1947, and then under the Health Services Act, has helped very considerably to get parents to co-operate. In very many of these cases it was the parents' attitude, or the home conditions, which required attention and alteration. Naturally they resented having to pay for their own "correction."

SPEECH THERAPY

In the autumn our Speech Therapist took up duty, and the first steps towards organising a limited service were taken by contacting the teachers, advising them of this development, and requesting the names of pupils whom they considered suitable for treatment. This was not easy, as it appeared many did not appreciate the type of case to be handled. In any case, each school had to be be visited to select suitable cases, and to group these into districts.

The schools nearest the selected centres were given priority to start with, though particular cases from outlying schools were provided for when possible. At the same time, selected schools were visited to arrange for suitable accommodation to be made available for speech therapy. Due regard was given to heating, ventilation, lighting, floor space, and accessibility of the chosen centre to other schools in that district. The chief difficulty was to get a room which could be used for a whole day at a time, and at the same hours each week, without any disturbance from school or other staff.

Eventually, ten centres were selected: for the North West area, Everton, Finiston and Grove; for the Central and South area, Fane Street, Linfield Intermediate and St. Comgall's; for the East side, Beechfield, Elmgrove and Oakleigh Schools. Not all these could be started at once, as we had to build up groups of pupils. Each had to be medically inspected, then the parents and children interviewed by the Speech Therapist, and a full case history built up. Eventually, by December the first centre was opened at Everton and the details for others made ready for opening in the New Year.

The statistical details are:—

Schools visited in search for accommodation ..	32
Schools visited for inspection of speech defectives ..	59
Children interviewed in schools	601
Case histories taken	31
Children accepted for immediate treatment	20

PHYSIO-THERAPY

In the last quarter of the year we started to organise classes for pupils requiring physio-therapy. From time to time previously, grosser conditions were referred to the orthopaedic clinics, but with the appointment of a physio-therapist, we could undertake the treatment of the lesser degrees of defect.

Our first task was to find suitable premises in which to hold our clinics, as there was no spare room in the schools which we could utilise. The first requirements of any centre was a smooth floor, together with ventilation, light and some source of heat. This limited our choice and delayed progress. Meantime, we commenced one centre in Cherryville Clinic to enable us to transfer the patients to one closer to their homes. Equipment, and presses in which to store it, had to be assembled.

Gradually, groups of children were examined, and allotted to the various centres. The second one opened at the beginning of November, and thereafter three others followed within a month, so that, by the end of the year, five centres were in operation, and 471 pupils were undergoing treatments.

HEAD CLEANSING

Although the introduction of new preparations which are capable of controlling head infestation, has had some effect on the incidence of head lice, yet the stricter standard set up has caused a larger number to be referred to the clinics for disinfestation. During the year 6,431 visits were paid by children coming for head cleansing, this being an increase of 53% on the figure for the previous year. Unfortunately, we are unable to get the younger and older contacts to come for cleansing at the same time, and so remove entirely the source of re-infection which is ever present as things are now.

PHYSICAL EDUCATION

The development of physical education in the schools has been held up because of several factors. Speaking generally these comprise the differing types of school, the accommodation available, the reaction of the teachers to the new programme and the lack of equipment.

In our large and more modern schools there is more playground space to be found than in the other schools. Use of these depends on the weather but it is always possible to fall back on assembly halls where these exist.

In connection with the use of the latter, it is essential that they should be kept scrupulously clean not only to prevent soiling of the pupils' clothing but to prevent the raising of a cloud of dust which will continue to hover and settle during the time such halls are being used for school meals.

From the medical side it is felt that the time provided in the programme for physical education is still inadequate especially for the primary schools. The new regulations for intermediate schools provide for periods of forty minutes each per week. There does not seem to be reason why comparable periods could not be arranged for those in the primary division who need this as much as those in the intermediate schools.

INFECTIOUS DISEASES

The over all picture of the incidence of infectious disease during 1948, is quite satisfactory. Chickenpox has certainly occurred throughout the year, but not to such an extent as to be classified as of epidemic proportions. Odd schools continued to be affected by measles, and they were the nidus for an aggregation of cases towards the end of the year in their localities. Concurrent with this came an increase in the number of mumps cases, and some whooping cough, but the incidence of the latter throughout the year was very low.

Scarlet fever and diphtheria affected school attendances to a negligible degree, and so long as the former remains of the mild type, and there is immunisation against diphtheria at the present high level, we need expect little trouble from these infections in the future.

HANDICAPPED PUPILS

In the accompanying Table is set forth a classification and the number of handicapped pupils known to us. It indicates the special educational treatment which they are receiving or of which they are in need.

The Tables previously used have been revised to give a truer picture of the types catered for and the extent of the provision made. The figures given for certain groups cannot be taken as final because there has been a break in the notifications on which we previously relied, and we have had to try and get information through alternative sources which are less reliable. The lack of this information prevents us from being able to assess correctly the present provision and to judge whether any extension of existing facilities is necessary.

No Table has been included for children who would receive home tuition because, to date, no organised scheme is in operation. Fourteen cases have been recommended for this form of special educational treatment, but at the close of the year the method of providing it had not been determined.

No apology is made for including in these Tables a group for delicate children. However much some may hold that the title is a misnomer, it still is, to our mind, the best under which to classify those pupils who are the chief concern of the School Medical Officer. Any special provision made, even if it be of the most elementary type, provided it be organised on correct lines and properly administered, will produce sometimes very remarkable results; sufficient in other people's judgement, to make them apply for similar care for cases in which they are interested. We still are handicapped by too few places for this type of child. Such as are available are readily filled by such cases as we discover. We have no need to look to other sources for such as will benefit by special schooling. Hitherto it has been inadvisable to approach general practitioners for recommendations because we would be overwhelmed with applications.

TABLE 10.

"Delicate" Pupils

AT	Hospital school		Open Air school		P.C.S.		No school		Totals	
GROUPS	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Rheumatism and Chorea.. ..	2	1	4	6	87	136	1	1	94	144
Hearts—mild ..	—	1	1	—	55	51	—	—	56	52
To Glands P.T.C.	11	10	11	2	215	197	7	5	244	214
Debility, Anæmia, Chests, etc. ..	1	—	61	67	237	231	—	2	299	300
TOTALS	26		152		1,209		16		1,403	

TABLE 11.

Physically Handicapped Pupils

AT	Hospital School		Sana-torium School		Open Air School		P.C.S.		No School		Total	
GROUPS	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Hearts—severe ..	—	2	—	—	—	9	67	73	5	4	72	88
Tuberculosis: Pulmonary Bone and Gland	21	19	7	10	3	—	26	26	7	6	64	62
Orthopædic	15	5	—	—	3	2	137	140	12	7	167	154
Other conditions	—	—	—	—	—	—	3	2	8	6	—	—
TOTALS	62		17		17		474		55		625	
									GRAND TOTAL OF TABLES 10 and 11		2028	

TABLE 12.

Handicapped Children

			Boys	Girls	Total
Blind (including partially sighted)	I. Suitable for training in school, or Class for the totally blind	Attending Certified Schools or Classes for the Blind	7	5	12
		Attending Public Elementary Schools	—	—	—
		At no school or institution	—	—	—
	II. Training in school or class for partially sighted	Attending Certified Schools or Classes for the Blind	12	17	29
		Attending Public Elementary Schools	3	5	8
		At no school or institution	3	—	3
Deaf (including deaf and/ or partially deaf)	I. Suitable for training in a school for the totally deaf or deaf and dumb	Attending Certified Schools or Classes for deaf and/or dumb	20	20	40
		Attending Public Elementary Schools	1	2	3
		At no school or institution	4	1	5
	II. Suitable for training in school or class for partially deaf and/or dumb	Attending Certified Schools or Classes for the deaf	3	9	12
		Attending Public Elementary Schools	3	1	4
		At no school or institution	2	—	2
Educationally Sub-normal	I. Educable Group	Attending School for Mentally Sub-normal children	117	81	198
	II. Requiring Special Care	Awaiting Admission	38	17	55
		Referred and waiting for examination, etc.	95	43	138
Epileptics	I. Suffering from severe epilepsy	Attending Certified Special Schools for Epileptics	—	—	—
		In institutions other than Certified Special Schools	—	—	—
		At Public Elementary Schools	10	6	16
		At no school or institution	2	1	3
	II. Suffering from Epilepsy that is not severe	Attending Public Elementary Schools	30	28	58
		At no school or institution	—	—	—

MASS RADIOGRAPHY SURVEY

During the year the Mass Miniature Radiography Scheme carried out by the Northern Ireland Tuberculosis Authority, was extended to a survey of primary school children. This radiological examination was carried out in May and August.

The total number of miniature photographs taken was 5,225—boys, 2,676 and girls, 2,549. Of this number 301 volunteers were requested to attend for large film examination and 137 for clinical examination.

The following is a summary of the diagnoses made in the course of the survey:

Total number of cases of Pulmonary Tuberculosis discovered	5
Total number of cases of Active Primary Tuberculosis discovered	8

In addition the following non-tuberculous conditions were discovered:—

Atypical Pneumonia	1
Bronchiectasis	10
Thickening of Pleura (due to previous pleurisy)	31
Heart Disease (congenital) (2 already known)	8
Heart Disease (acquired) (6 already known)	19

I am indebted to the Medical Director of the Mass Radiography Centre for the statistical summary of the above survey.

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